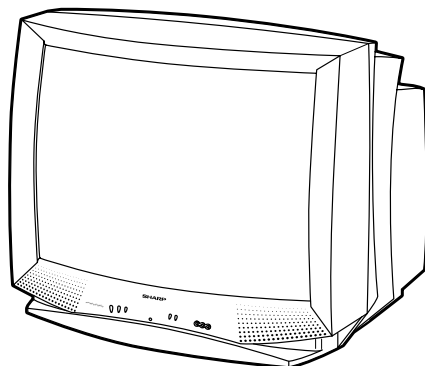


SHARP SERVICE MANUAL

S31R532R-S50/



COLOR TELEVISION

Chassis No. SN-92M

MODELS 32R-S50, 32R-S400 36R-S50, 36R-S400

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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ELECTRICAL SPECIFICATIONS

POWER INPUT	120V AC 60 Hz
POWER RATING	
32R-S50/S400	140W
36R-S50/S400	165W
PICTURE SIZE	
32R-S50/S400	3,073cm ² (476sq inch)
36R-S50/S400	3,905cm ² (605sq inch)
CONVERGENCE	Magnetic
SWEEP DEFLECTION	Magnetic
FOCUS	Hi-Bi-Potential Electrostatic
INTERMEDIATE FREQUENCIES	
Picture IF Carrier Frequency	45.75 MHz
Sound IF Carrier Frequency	41.25 MHz
Color Sub-Carrier Frequency	42.17 MHz
	(Nominal)

AUDIO POWER	
OUTPUT RATING	3.0W + 3.0W (at 10% distortion and
	Dual CH Operate)
SPEAKER	
SIZE	12 x 6 cm (2 pcs.)
VOICE COIL IMPEDANCE	6 ohm at 400 Hz
ANTENNA INPUT IMPEDANCE	
VHF/UHF	75 ohm Unbalanced
TUNING RANGES	
VHF-Channels	2 thru 13
UHF-Channels	14 thru 69
CATV Channels	1 thru 125
	(EIA, Channel Plan U.S.A.)

Specifications are subject to change without prior notice.

SHARP CORPORATION

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The contents are subject to change without notice.

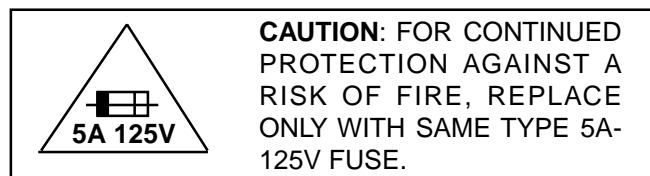
IMPORTANT SERVICE SAFETY PRECAUTION

■ Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.
3. Semiconductor heat sinks are potential shock hazards when the chassis is operating.
4. The chassis in this receiver has two ground systems which are separated by insulating material. The non-isolated (hot) ground system is for the B+ voltage regulator circuit and the horizontal output circuit. The isolated ground system is for the low B+ DC voltages and the secondary circuit of the high voltage transformer.

To prevent electrical shock use an isolation transformer between the line cord and power receptacle, when servicing this chassis.



SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove the static charge by connecting a 10k ohm resistor in series with an insulated wire (such as a test probe) between the picture tube ground and the anode lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage anode completely.

X-RADIATION AND HIGH VOLTAGE LIMITS

1. Be sure all service personnel are aware of the procedures and instructions covering X-radiation. The only potential source of X-ray in current solid state TV receivers is the picture tube. However, the picture tube does not emit measurable X-Ray radiation, if the high voltage is as specified in the "High Voltage Check" instructions.

It is only when high voltage is excessive that X-radiation is capable of penetrating the shell of the picture tube including the lead in the glass material. The important precaution is to keep the high voltage below the maximum level specified.

2. It is essential that servicemen have available at all times an accurate high voltage meter. The calibration of this meter should be checked periodically.
3. High voltage should always be kept at the rated value –no higher. Operation at higher voltages may cause a failure of the picture tube or high voltage circuitry and;also, under certain conditions, may produce radiation in exceeding of desirable levels.
4. When the high voltage regulator is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be tested while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
5. Do not use a picture tube other than that specified or make unrecommended circuit modifications to the high voltage circuitry.
6. When trouble shooting and taking test measurements on a receiver with excessive high voltage, avoid being unnecessarily close to the receiver. Do not operate the receiver longer than is necessary to locate the cause of excessive voltage.

IMPORTANT SERVICE SAFETY PRECAUTION

(Continued)

BEFORE RETURNING THE RECEIVER

(Fire & Shock Hazard)

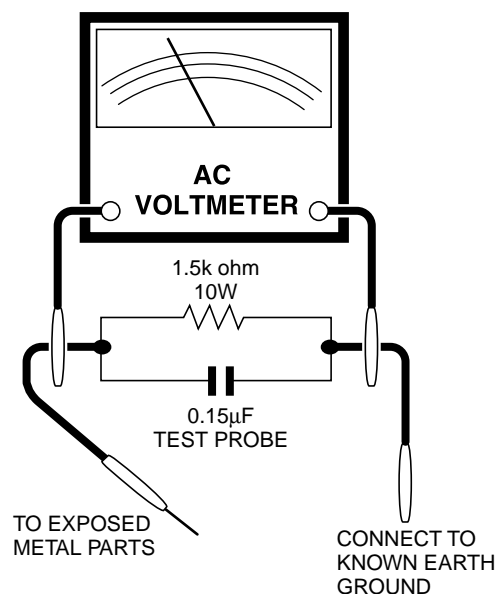
Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
 - Plug the AC cord directly into a 120 volt AC outlet, (Do not use an isolation transformer for this test).
 - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15 μ F capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.
 - Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor.

- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

All checks must be repeated with the AC line cord plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these check.)

Any current measured must not exceed 0.5 milliamp. Any measurements not within the limits outlined above indicate of a potential shock hazard and corrective action must be taken before returning the instrument to the customer.



SAFETY NOTICE

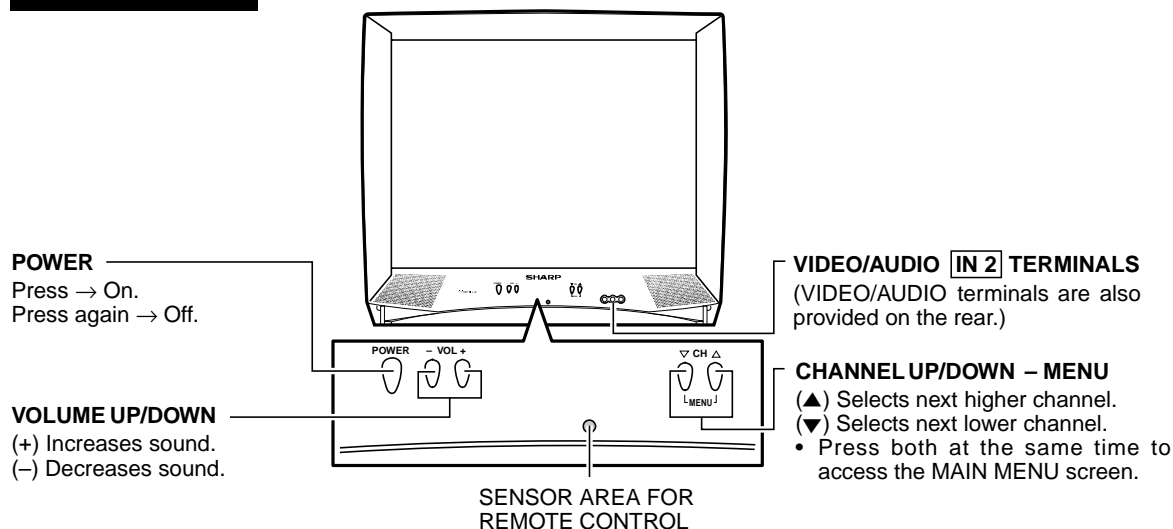
Many electrical and mechanical parts in television receivers have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by " \triangle " and shaded areas in the Replacement Parts Lists and Schematic Diagrams.

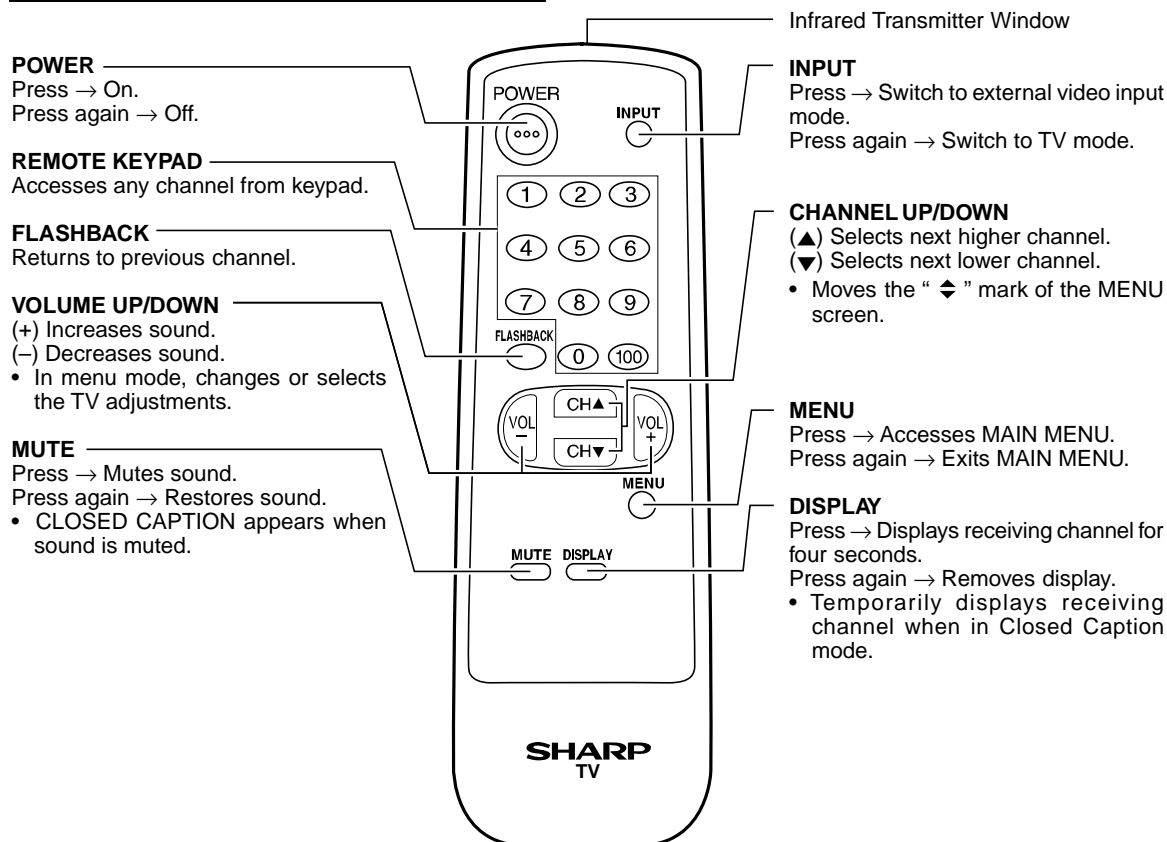
For continued protection, replacement parts must be identical to those used in the original circuit. The use of substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-radiation or other hazards.

LOCATION OF USER'S CONTROL (32R-S50, 36R-S50)

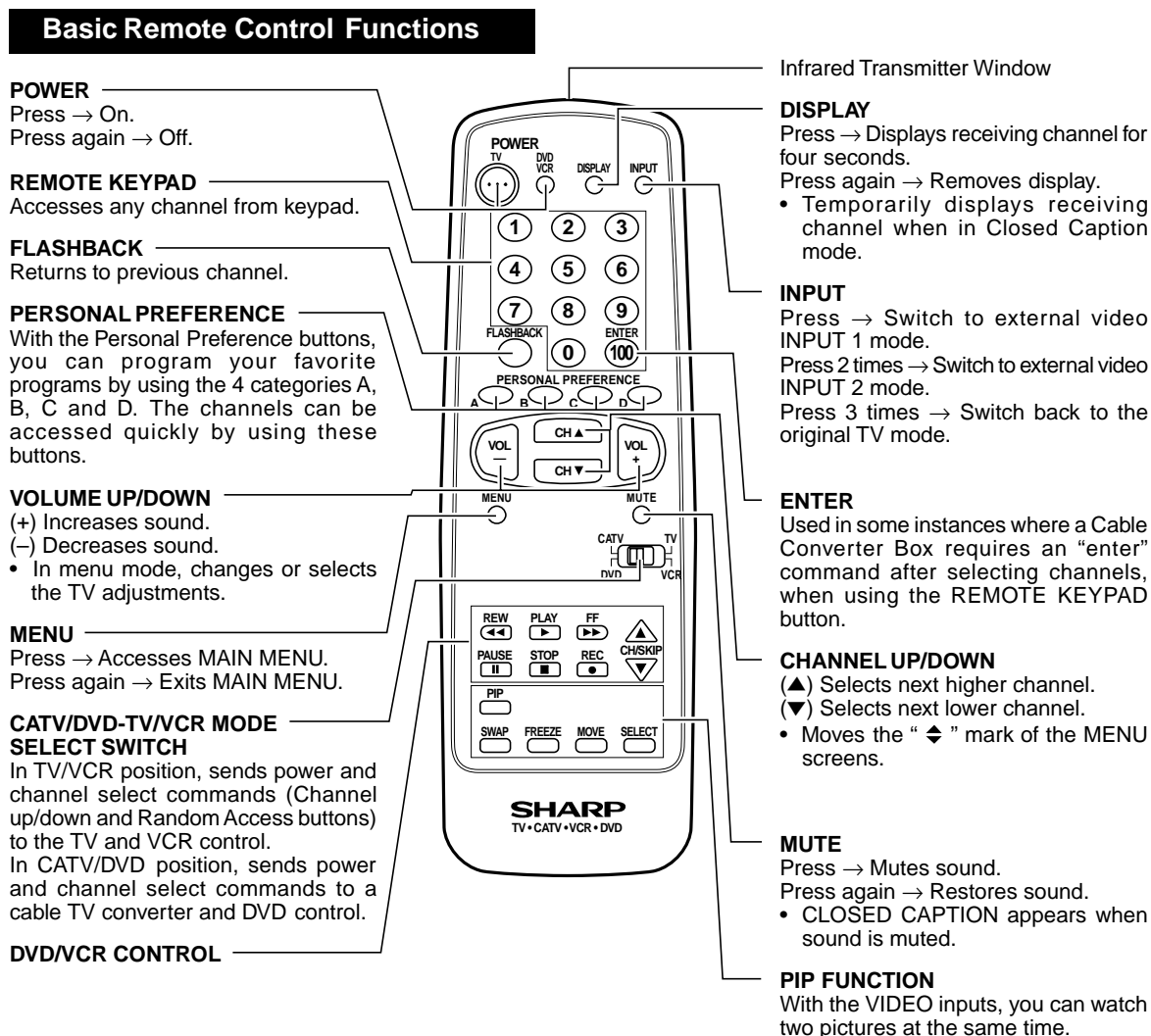
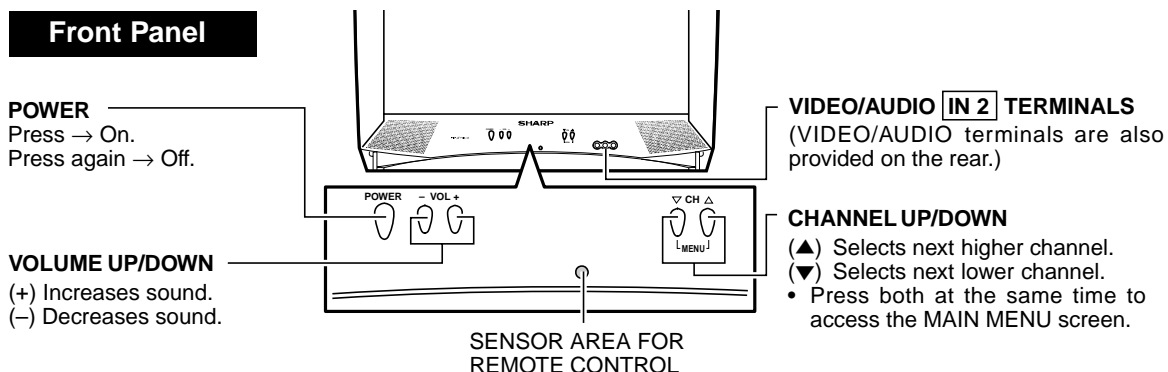
Front Panel



Basic Remote Control Functions



LOCATION OF USER'S CONTROL (Continued) (32R-S400, 36R-S400)



Note:

- The above shaded buttons on the Remote Control glow in the dark. To use the glow-in-the-dark display on the remote control, place it under a fluorescent light or other lighting.
- The phosphorescent material contains no radioactive or toxic material, so it is safe to use.
- The degree of illumination will vary depending on the strength of lighting used.
- The degree of illumination will decrease with time and depending on the temperature.
- The time needed to charge the phosphorescent display will vary depending on the surrounding lighting.
- Sunlight and fluorescent lighting are the most effective when charging the display.

INSTALLATION AND SERVICE INSTRUCTIONS

- Note:** (1) When performing any adjustments to resistor controls and transformers use non-metallic screwdrivers or TV alignment tools.
(2) Before performing adjustments, the TV set must be on at least 15 minutes.

CIRCUIT PROTECTION

The receiver is protected by a 5.0A fuse (F701), mounted on PWB-A, wired into one side of the AC line input.

X-RADIATION PROTECTOR CIRCUIT TEST

After service has been performed on the horizontal deflection system, high voltage system, B+ system, test the X-Radiation protection circuit to ascertain proper operation as follows:

1. Apply 120V AC using a variac transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Receive a good local channel.
4. Connect a digital voltmeter to TP653 and make sure that the voltmeter reads $13.8 \pm 0.7V$ (32R-S50, 32R-S400)/ $13.2 \pm 0.7V$ (36R-S50, 36R-S400).
5. Apply external 17.0V DC (32R-S50, 32R-S400)/16.2V DC (36R-S50, 36R-S400) at TP653 by using an external DC supply, TV must be shut off.
6. To reset the protector, unplug the AC cord and plug the AC cord power on. Now make sure that normal picture appears on the screen.
7. If the operation of the horizontal oscillator does not stop in step 5, the circuit must be repaired before the set is returned to the customer.

HIGH VOLTAGE CHECK

High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified checks should be as follows:

1. Connect an accurate high voltage meter between ground and anode of picture tube.
2. Operate receiver for at least 15 minutes at 120V AC line voltage, with a strong air signal or a properly tuned in test signal.
3. Enter the service mode and select the service adjustment "S19" and Bus data "01" (Y-mute on).
4. The voltage should be approximately 32.8kV(32R-S50, 32R-S400)/33.4kV(36R-S50, 36R-S400) (at zero beam).
If a correct reading cannot be obtained, check circuitry for malfunctioning components. After the voltage test, make Y-mute off to the normal mode.

For adjustments of this model, the bus data is converted to various analog signals by the D/A converter circuit.

Note: There are still a few analog adjustments in this series such as focus and master screen voltage. Follow the steps below whenever the service adjustment is required. See "Table-B" to determine, if service adjustments are required.

1. Service mode

Before putting unit into the service mode, check that customer adjustments are in the normal mode. Use the reset function in the video adjustment menu to ensure customer controls are in their proper (reset) position.

2. Service number selection

Once in the service mode, press the Ch-up or Ch-down button on the remote controller or at the set. The service adjustment number will vary in increments of one, from "S01" to "P07". Select the item you wish to adjust.

3. Data number selection

Press the Vol-up or vol-down button to adjust the data number.

To enter the service mode and exit service mode.

While pressing the Vol-up and Ch-up buttons at the same time, plug the AC cord into a wall socket.

Now the TV set is switched on and enters the service mode.

To exit the service mode, turn the television off by pressing the power button.

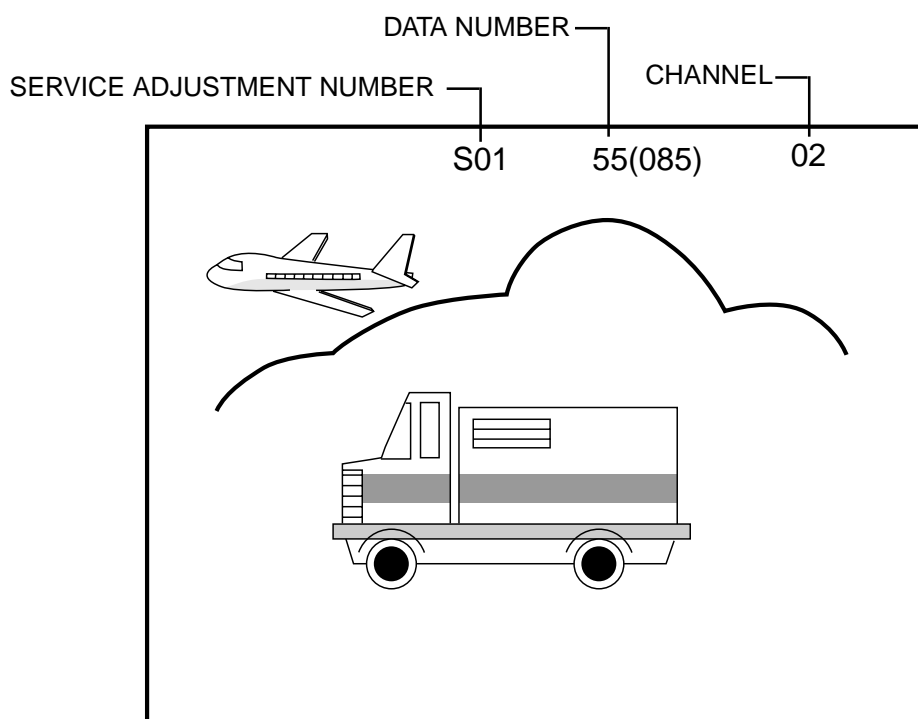


Figure A.

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		ADJUSTMENT CONTENTS
		INITIAL VALUE	RANGE	
S01	PICTURE	5E	00-7F	Must be set to "24" Must be set to "00"
S02	TINT	46	00-7F	
S03	COLOUR	32	00-7F	
S04	BRIGHTNESS	40	00-7F	
S05	SHARPNESS	28	00-3F	
S06	Vert. PHASE	00	00-07	
S07	Hor. PHASE	12	00-1F	
S08	RF AGC	23	00-3F	
S09	Vert. AMPLITUDE	20	00-3F	
S10	PIF VCO	2C	00-7F	
S11	R CUT-OFF	00	00-FF	
S12	G CUT -OFF	00	00-FF	
S13	B CUT-OFF	00	00-FF	
S14	G GAIN	7F	00-FF	
S15	B GAIN	7F	00-FF	
S16	TRAP	00	00,01	Must be set to "01"
S17		4B	00-3F	
S18	CC POSITION	17	00-FF	
S19	MUTE	00	00,01,03	"00" : NORMAL, "01" : Y-MUTE, "03" : V-STOP & Y-MUTE
S20	ENERGY SAVE OFFSET	20	00-3F	Must be set to "23"
S21	PERIOD ADJ.	7A	00-FF	Must be set to "7A"
S22	FAO VOLUME STEP	25	00-32	
S23	TUNER	00	00,01	Must be set to "00"
S24	FAV. COLOR RTONE-G	F9	00-FF	
S25	FAV. COLOR RTONE-B	EB	00-FF	
S26	FAV. COLOR BTONE-G	02	00-FF	
S27	FAV. COLOR BTONE-B	08	00-FF	
S28	COLOR TEMP LOW-G	E1	00-FF	
S29	COLOR TEMP LOW-B	AE	00-FF	
S30	COLOR TEMP ML-G	FA	00-FF	
S31	COLOR TEMP ML-B	E7	00-FF	
S32	COLOR TEMP HIGH-G	08	00-FF	
S33	COLOR TEMP HIGH-B	14	00-FF	
OP1	OPTION1	00	00-FF	Must be set to "B1" for 32R-S50/36R-S50 Must be set to "B7" for 32R-S400/36R-S400
OP2	OPTION2	00	00-FF	Must be set to "C7" for 32R-S50/36R-S50 Must be set to "E7" for 32R-S400/36R-S400
M01	INPUT LEVEL	0A	00-0F	
M02	ST VCO	20	00-3F	
M03	FILTER	1C	00-3F	
M04	WIDE BAND	20	00-3F	
M05	SPECTRAL	1B	00-3F	
P01	PIP Y-LEVEL	30	00-7F	
P02	PIP TINT	29	00-3F	Must be set to "29" for 32R-S400/36R-S400
P03	PIP COLOR	2E	00-7F	
P04	PIP Y-OFFSET	09	00-1F	Must be set to "09" for 32R-S400/36R-S400
P05	PIP H-POSITION	0A	00-FF	Must be set to "0A" for 32R-S400/36R-S400
P06	PIP BGPM	00	00-0F	Must be set to "00" for 32R-S400/36R-S400
P07	PIP FREERUN	0B	00-0F	Must be set to "0B" for 32R-S400/36R-S400

Table - A

Holding down both the VOL-up/CH-down buttons on the TV set at service mode for more than 2 seconds will automatically write the above initial values into IC2101.

PART REPLACED	ADJUSTMENT		NOTES
	NECESSARY	UNNECESSARY	
IC2001		X	Data is stored in IC2101.
IC201	X		The adjustment is needed to compensate for characteristics of parts including IC201 and MTS level (M01).
IC2101	X		Holding down both the VOL-up/CH-down buttons on the TV set in the service mode for more than 2 seconds will automatically write the above initial values into IC2101. Then perform a complete adjustment.
CRT	X		Adjust items related to picture tube only.
IC3001	X		Adjust items related to MTS only (M01~M05).
IC1801	X		Adjust items related to P-IN-P only (P01~P07).

Table - B

■ SERVICE ADJUSTMENT

VCO Adjustment

1. Connect a digital voltmeter between pin (44) of IC201 and ground.
2. Receive a good local channel.
3. Enter the service mode and select the service adjustment "S10".
4. Adjust the data so that digital voltmeter reads 2.2V.
5. Adjustment is completed, remove the voltmeter, return to "normal" mode.

RF AGC Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S08".
3. Set the data value to point where no noise or beat appears.
4. Select another channel to confirm that no noise or beat appears.

Note 1 : You will have to come out of the service mode to select another channel.

Note 2 : Setting the data to "00" will produce a black raster.

Screen Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S03" and set the data value to "00" to set the color level to minimum. (Record original data code under adjustment "S03" before changing) You may skip this step, if you selected a B/W picture or monoscope pattern.
3. Select the service adjustment "S19" and adjust the data value to "01", this turn off the luminance signal (Y-mute).
4. Select the service adjustment "S04" and adjust data value to "4B".
5. Adjust the master screen control until the raster darkens to the point where raster is barely seen.
6. Adjust the service adjustments "S11" red, "S12" green and "S13" blue to obtain a good grey scale with normal whites at low brightness level.
7. Select the service adjustment "S19" and reset data to "00". Select the service adjustment "S03" and reset data to obtain normal color level.
8. Reset the master screen control to obtain normal brightness range.

White Balance Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S03" and set to "00" (minimum color)(Record original data code under adjustment "S03" before changing). "S03" does not have to be adjusted, if you selected a B/W picture or monoscope pattern.
3. Alternately adjust the service adjustment data of "S14" and "S15" until a good grey scale with normal whites is obtained.
4. Select the service adjustment "S03" and adjust data to obtain normal color level.

Sub-Picture Adjustment

1. Receive a good local channel.
2. Make sure the customer picture control is set to maximum.
3. Enter the service mode and select the service adjustment "S01".
4. Adjust the data value to achieve normal contrast range.

Sub-Tint Adjustment

1. Receive a good local channel.
2. Set customer tint control to center of it's range.
3. Enter the service mode and select the service adjustment "S02".
4. Adjust "S02" data value to obtain normal flesh tones.

Sub-Color Adjustment

1. Receive a good local channel.
2. Make sure the customer color control is set to center position .
3. Enter the service mode and select service adjustment "S03".
4. Adjust "S03" data value to obtain normal color level.

Sub-Brightness Adjustment

1. Receive a good local channel.
2. Make sure the customer brightness control is set to center position.
3. Enter the service mode and select the service adjustment "S04".
4. Adjust "S04" data value to obtain normal brightness level.

Vertical-Size and Linearity Adjustments

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S09".
3. While observing the top and bottom of the screen, adjust "S09" data value to proper vertical size.
4. Using the R502 control adjust for the best linearity.

Vertical Phase Adjustment

1. Enter the service mode and select the service adjustment "S06".
2. Adjust data value to "00".
Note: This must be set "00" when changed data retrace line will appear.

Horizontal Position Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S07".
3. Adjust "S07" data value so that picture is centered.

Caption Position Adjustment (Horizontal)

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S18".
3. A black text box appears on the screen. (see **Figure B.** below)
4. Adjust "S18" data value so that text box is positioned in the center of the screen.

3.58MHz Trap Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S16".
3. This is a two position adjustment, "00" is ON, "01" is OFF.
4. Adjust data value to "01" for normal viewing.

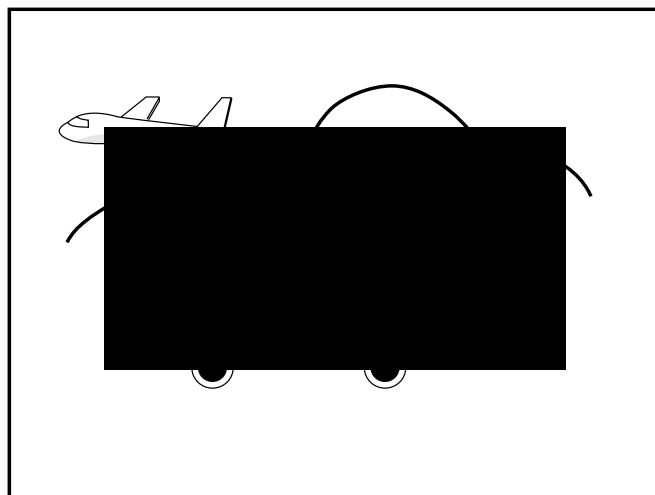


Figure B.

Sharpness and Audio Balance Adjustments

1. Receive a good local channel.
 2. Enter the service mode and select the service adjustments "S05" for sharpness and "S17" for audio balance.
- **Sharpness Adjustment**
 - 3. Adjust data value to "24"(center of data range) for sharpness adjustment.
 - **Audio Balance Adjustment**
 - 4. Adjust data value to "20"(center of data range) for Audio balance adjustment.

Vertical Center Adjustment

1. Receive a good CATV channel.
2. Adjust the S502 so that the picture is centered.

Side Pincushion Adjustment

1. Receive a good CATV channel or crosshatch pattern signal.
2. Adjust the R676 so that the outermost line on the screen is straight.

Horizontal Size Adjustment

1. Receive a good CATV channel or crosshatch pattern signal.
2. Adjust the R678 so that the best horizontal size.

Energy Save Offset Adjustment

1. Enter the service mode and select the service adjustment "S20".
2. Adjust data value to "23".
Note : This position is used to preset the level for the energy save function.

Other Adjustments

1. Enter the service mode.
2. Adjust the following data values as listed below.

SERVICE POSITION	ADJUST ITEM	DATA (Hex)
S05	SHARPNESS	24
S06	V-PHASE	00
S16	TRAP	01
S20	E-SAVE	23
S21	TIMER	7A
S23	TUNER SETUP	00
S22	FAO	25
S28	COL. TEMP. LOW-G	E1
S29	COL. TEMP. LOW-B	AE
S30	COL. TEMP. ML-G	FA
S31	COL. TEMP. ML-B	E7
S32	COL. TEMP. ML-B	08
S33	COL. TEMP. HIGH-G	14

SERVICE POSITION	32R-S50, 36R-S50	32R-S400, 36R-S400
OP1	B1	B7
OP2	C7	E7

■ MTS ADJUSTMENT

MTS Level Adjustment

1. Feed the following monaural signal to pin (14) of IC3001.
Monaural signal : 300Hz, 245mVrms
2. Connect the rms voltmeter to pin (39) of IC3001.
3. Enter the service mode and select the service adjustment "M01".
4. Adjust the data so that the rms voltmeter reads 490 ± 10 mVrms.

MTS VCO Adjustment

1. Keep the unit in no-signal state.
2. Connect the frequency counter to pin (39) of IC3001.
3. Connect a capacitor (100 μ F, 50V) in between positive(+) side of C3005 and ground.
4. Enter the service mode and select the service adjustment "M02".
5. Adjust the data so that the frequency counter reads 62.94 ± 0.75 kHz.

Filter Adjustment

1. Feed the following stereo pilot signal to pin (14) of IC3001 .
Stereo pilot signal: 9.4kHz, 600mVrms.
2. Enter the service mode and select the service adjustment "M03".
3. Adjust the data until "OK" appears in position on the screen. Make sure the "OK" is displayed almost at the center of the data range.

Separation Adjustment

1. Connect the rms voltmeter to pin (39) of IC3001.
2. Receive the following composite stereo signal 1.
Composite stereo signal: 30% modulation, left channel only, noise reduction on, 300Hz
3. Enter the service mode and select the service adjustment "M04".
4. Adjust the data until the AC voltage reading of the RMS voltmeter is minimum.
5. Receive the following composite stereo signal 2.
Stereo signal: 30% modulation, left channel only, noise reduction on, 3kHz
6. Enter the service mode and select the service adjustment "M05".
7. Adjust the data until the AC voltage reading of the RMS voltmeter is minimum.
8. Take the above steps 1 thru 7 again for fine adjustment.

■ P-IN-P ADJUSTMENT

(Only for 32R-S400, 36R-S400)

P-IN-P Y-LEVEL Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "P01".
3. Adjust "P01" data value to obtain normal contrast level.

P-IN-P TINT Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "P02".
3. Adjust data value to "29".

P-IN-P COLOR Adjustment

1. Receive a good local channel.
2. Make sure the customer color control is set to center position.
3. Enter the service mode and select service adjustment "P03".
4. Adjust "P03" data value to obtain normal color level.

P-IN-P Y-OFF SET Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "P04".
3. Adjust data value to "09".

P-IN-P H-POSITION Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "P05".
3. Adjust data value to "0A".

P-IN-P BURST GATE PULSE (for MAIN)

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "P06".
3. Adjust data value to "00".

P-IN-P FREERUN

1. Receive a good local channel.
2. Enter the service mode and select service adjustment "P07".
3. Adjust data value to "0B".



MODELS 32R-S400, 36R-S400 CHASSIS LAYOUT

H

G

F

E

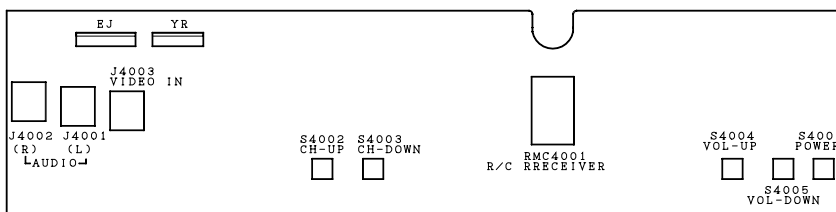
D

C

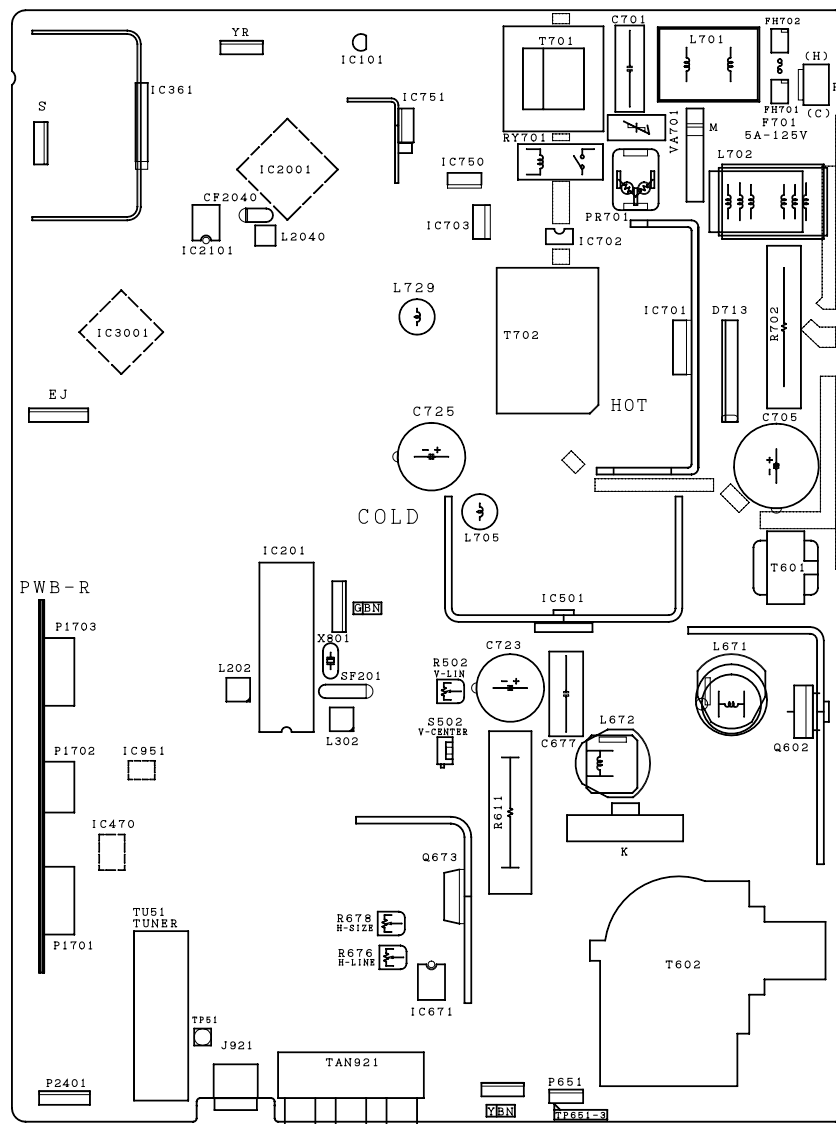
B

A

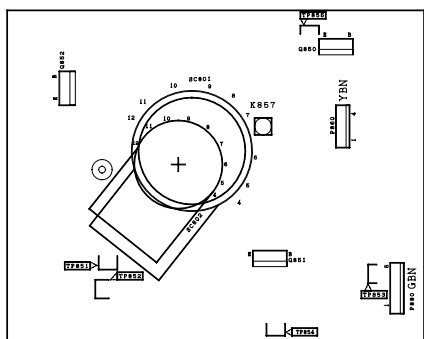
PWB-F



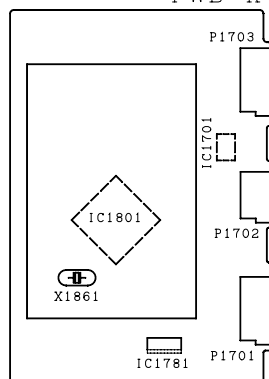
PWB-A



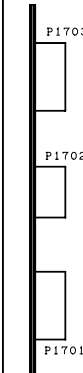
PWB-B



PWB-R



PWB-R



1

2

3

4

5

6

DESCRIPTION OF SCHEMATIC DIAGRAM

NOTES:

1. The unit of resistance "ohm" is omitted.
($K=k\Omega=1000\Omega$, $M=M\Omega$)
2. All resistors are 1/8 watt, unless otherwise noted.
3. All capacitors are μF , unless otherwise noted.
($P=pF=\mu\mu F$)
4. (G) indicates $\pm 2\%$ tolerance may be used.
5. $\overline{\text{---}}$ indicates line isolated ground.

VOLTAGE MEASUREMENT CONDITIONS:

1. All DC voltages are measured with DVM connected between points indicated and chassis ground, line voltage set at 120V AC and all controls set for normal picture unless otherwise indicated.
2. All voltages measured with 1000 μ V B & W or Color signal.

WAVEFORM MEASUREMENT CONDITIONS:

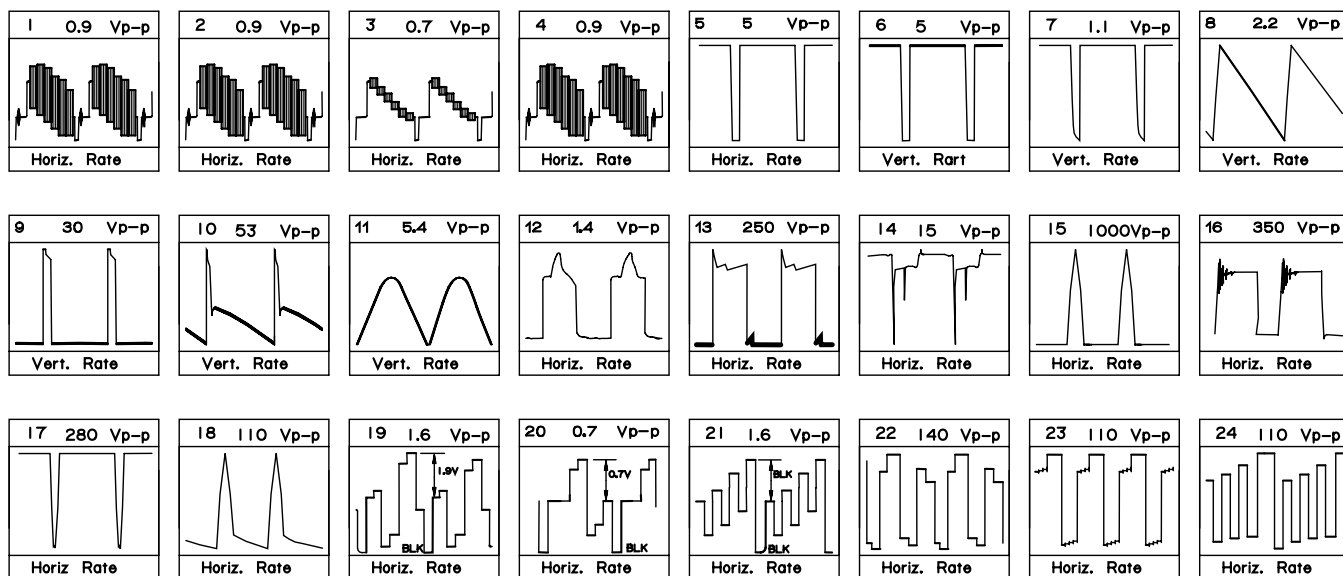
1. Photographs taken on a standard gated color bar signal, the tint setting adjusted for proper color. The wave shapes at the red, green and blue cathodes of the picture tube depend on the tint, color level and picture control.
2. \bigcirc indicates waveform check points (See chart, waveforms are measured from point indicated to chassis ground.)

\triangle AND SHADED () COMPONENTS
= SAFETY RELATED PARTS.

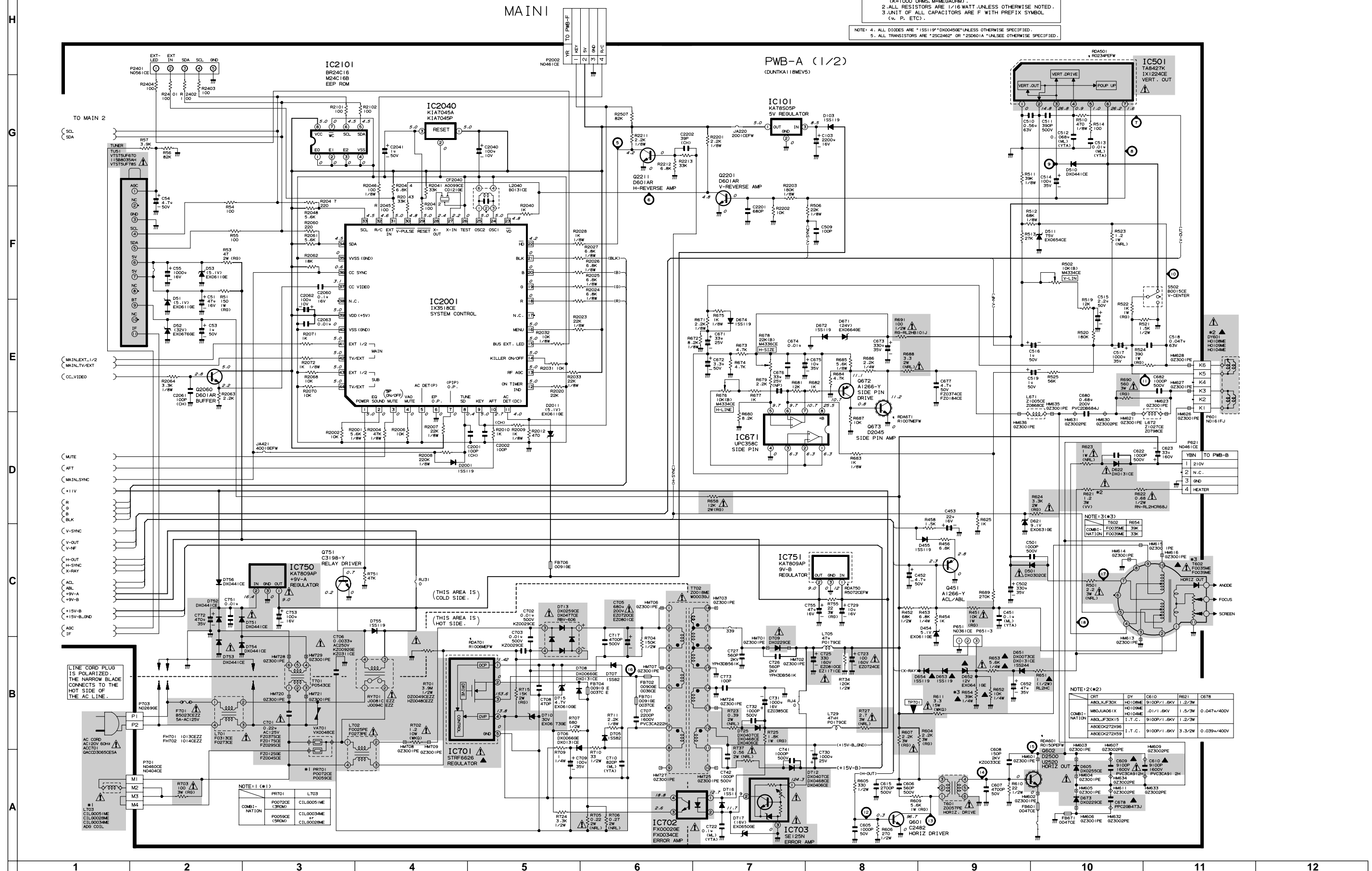
\blacktriangle MARK= X-RAY RELATED PARTS.

This circuit diagram is a standard one, printed circuits may be subject to change for product improvement without prior notice.

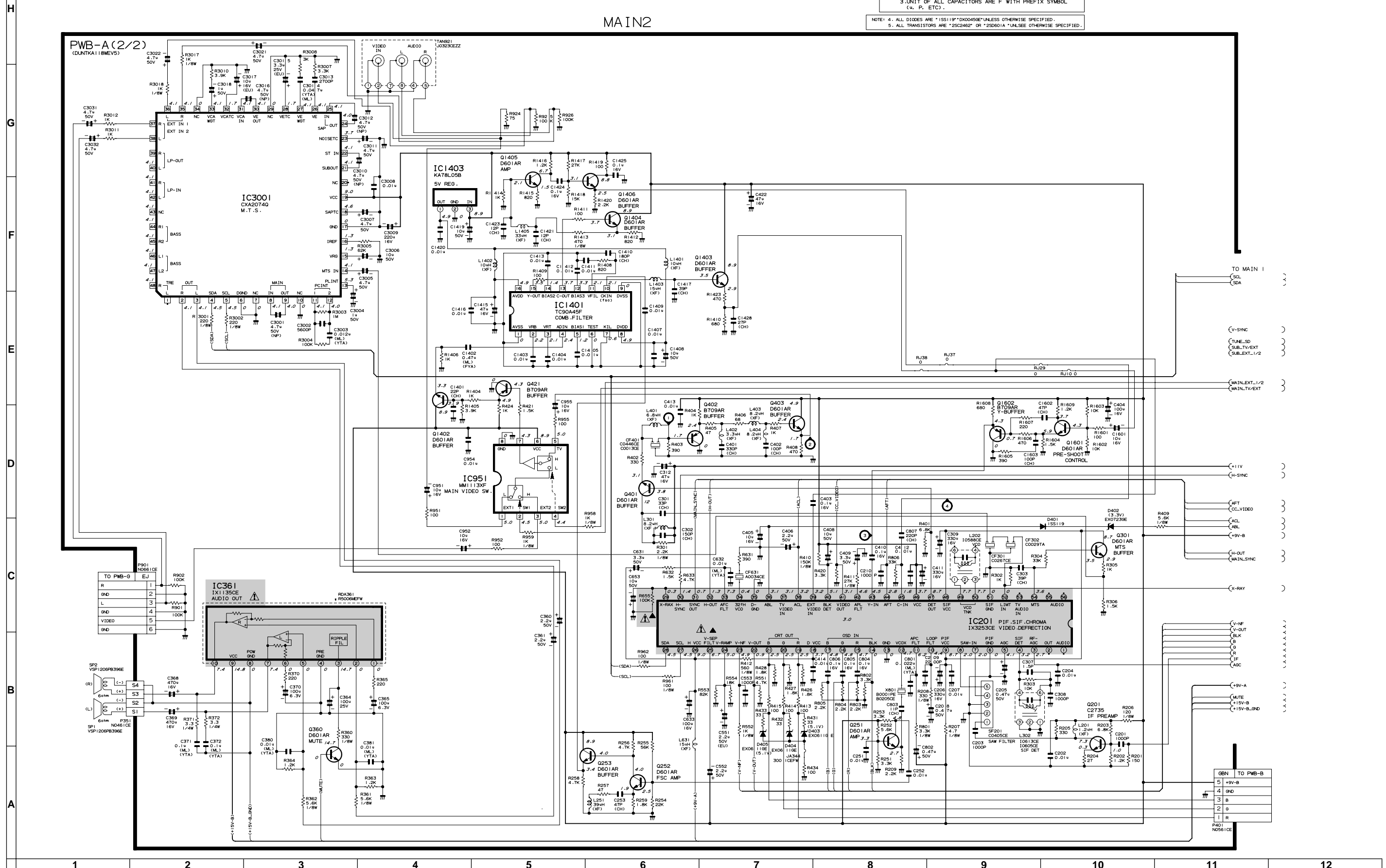
WAVEFORMS



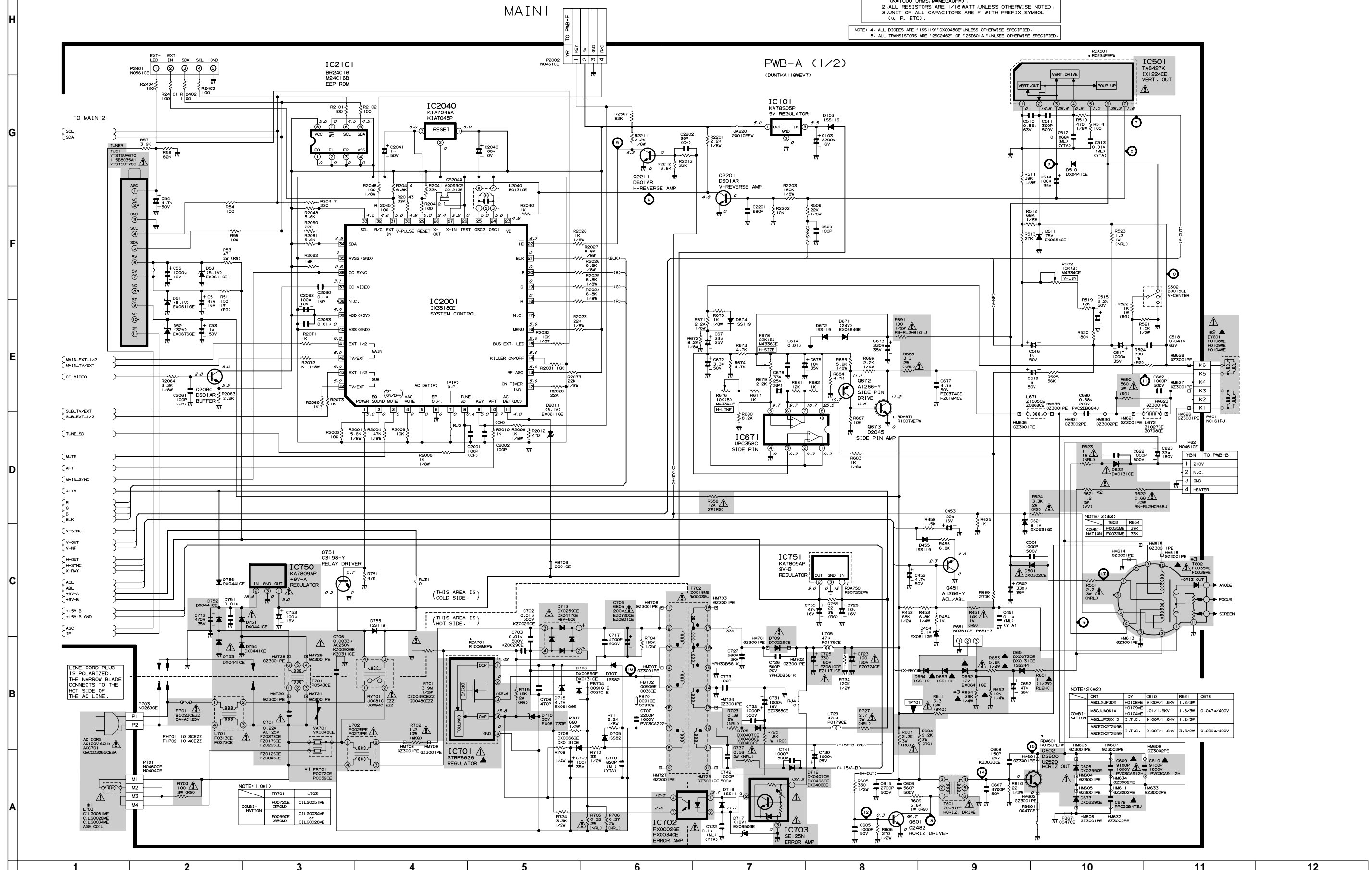
MODEL 32R-S50 SCHEMATIC DIAGRAM: MAIN-1 Unit



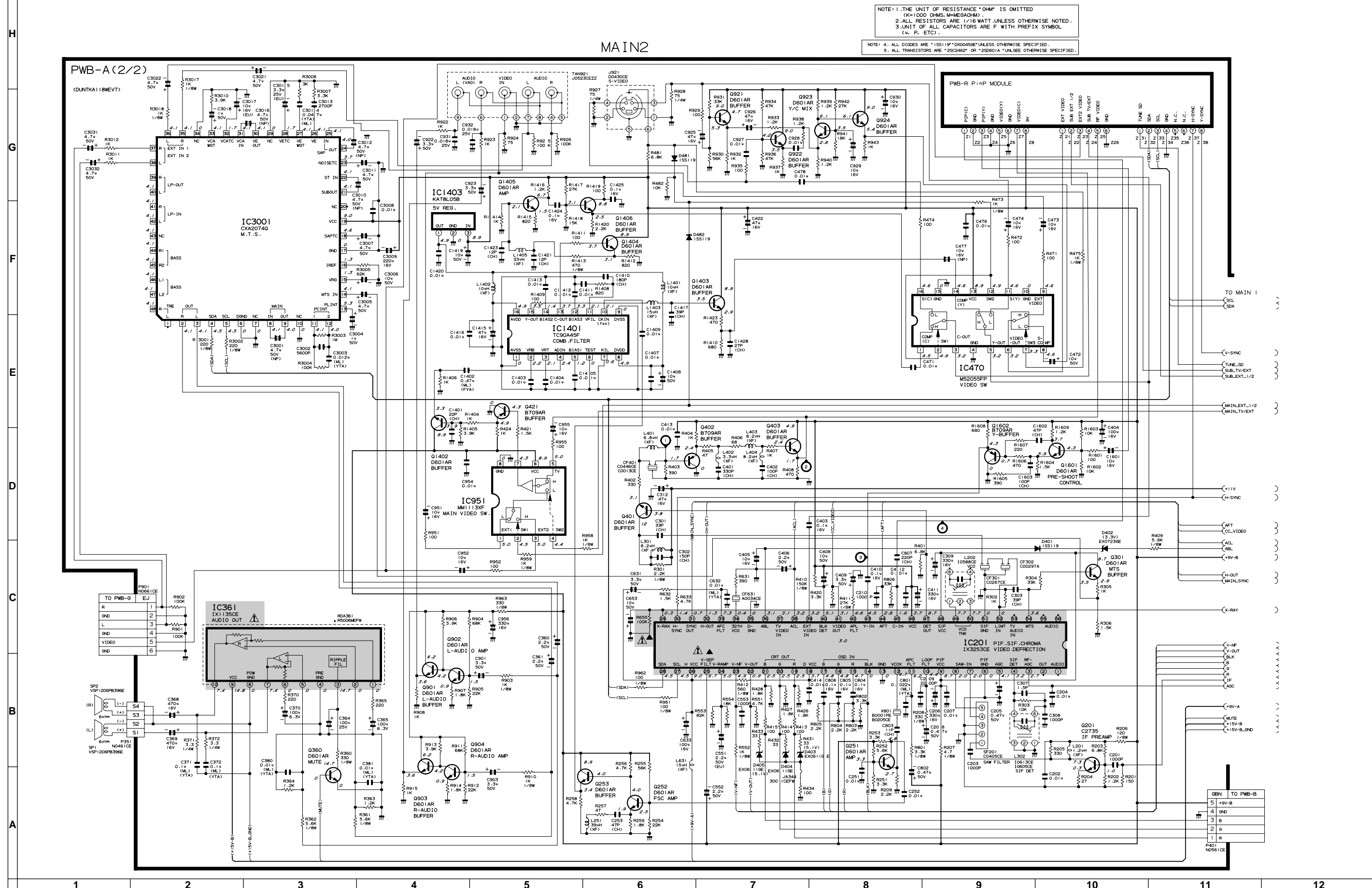
MODEL 32R-S50 SCHEMATIC DIAGRAM: MAIN-2 Unit



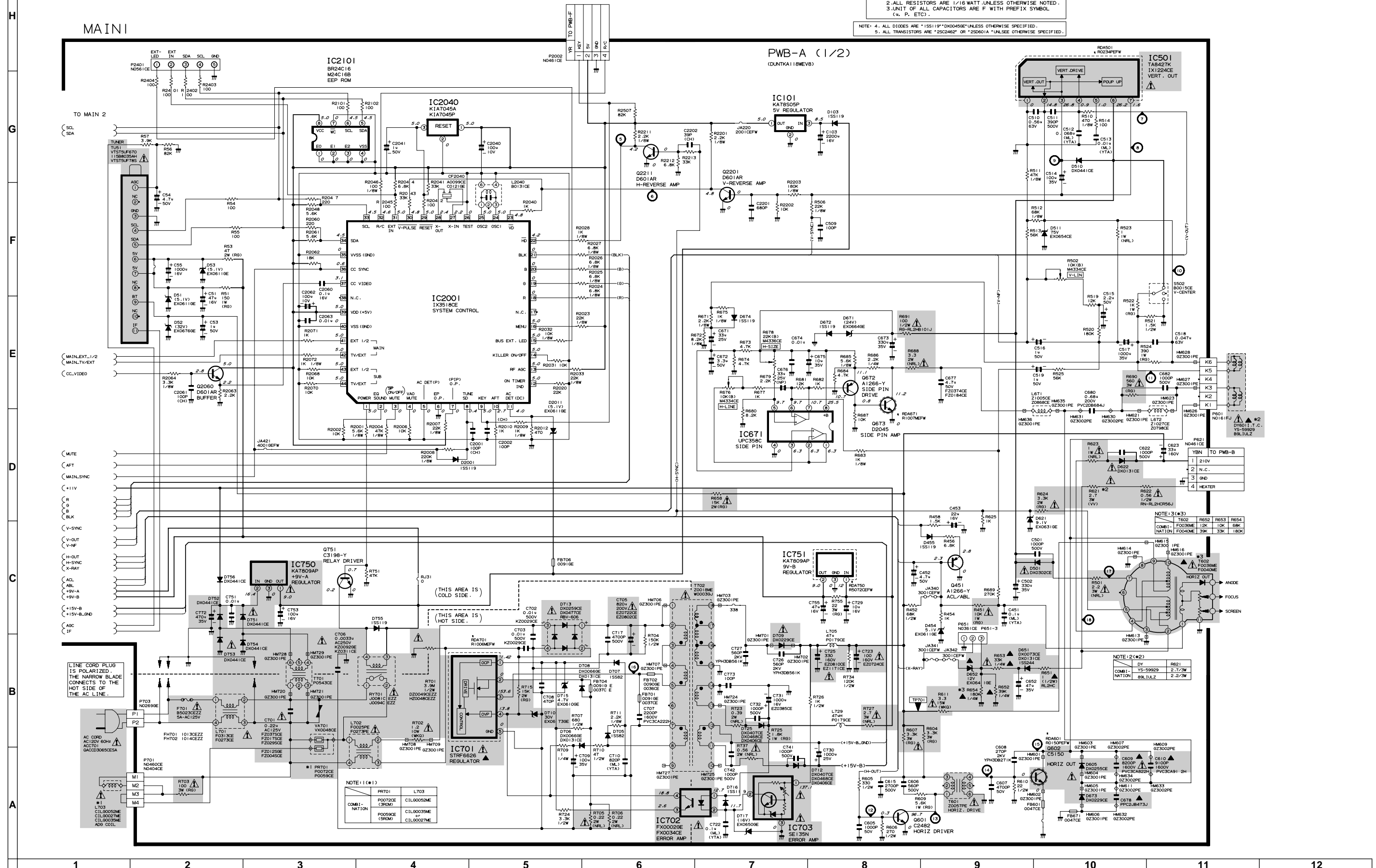
MODEL 32R-S400 SCHEMATIC DIAGRAM: MAIN-1 Unit



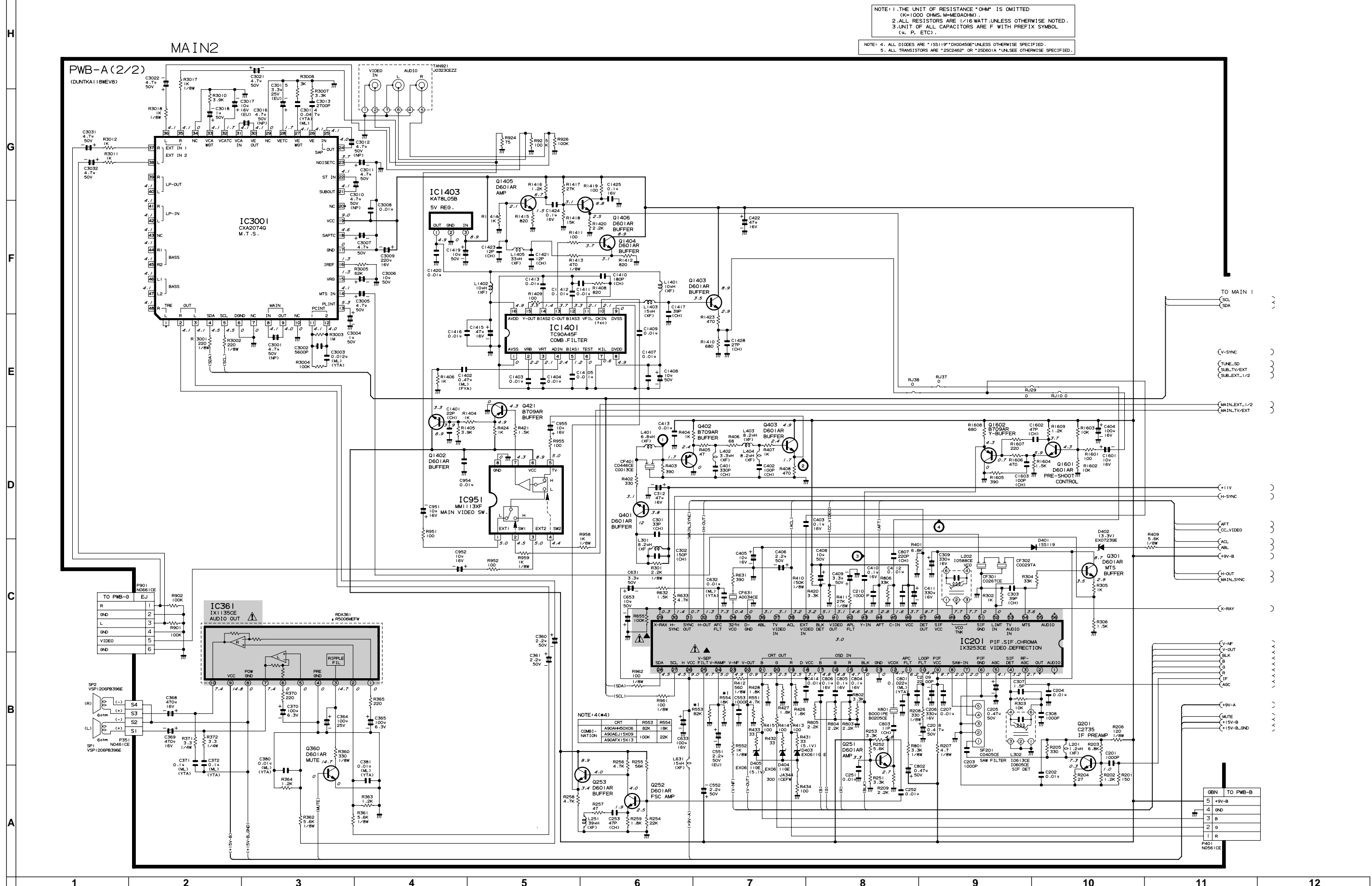
MODEL 32R-S400 SCHEMATIC DIAGRAM: MAIN-2 Unit



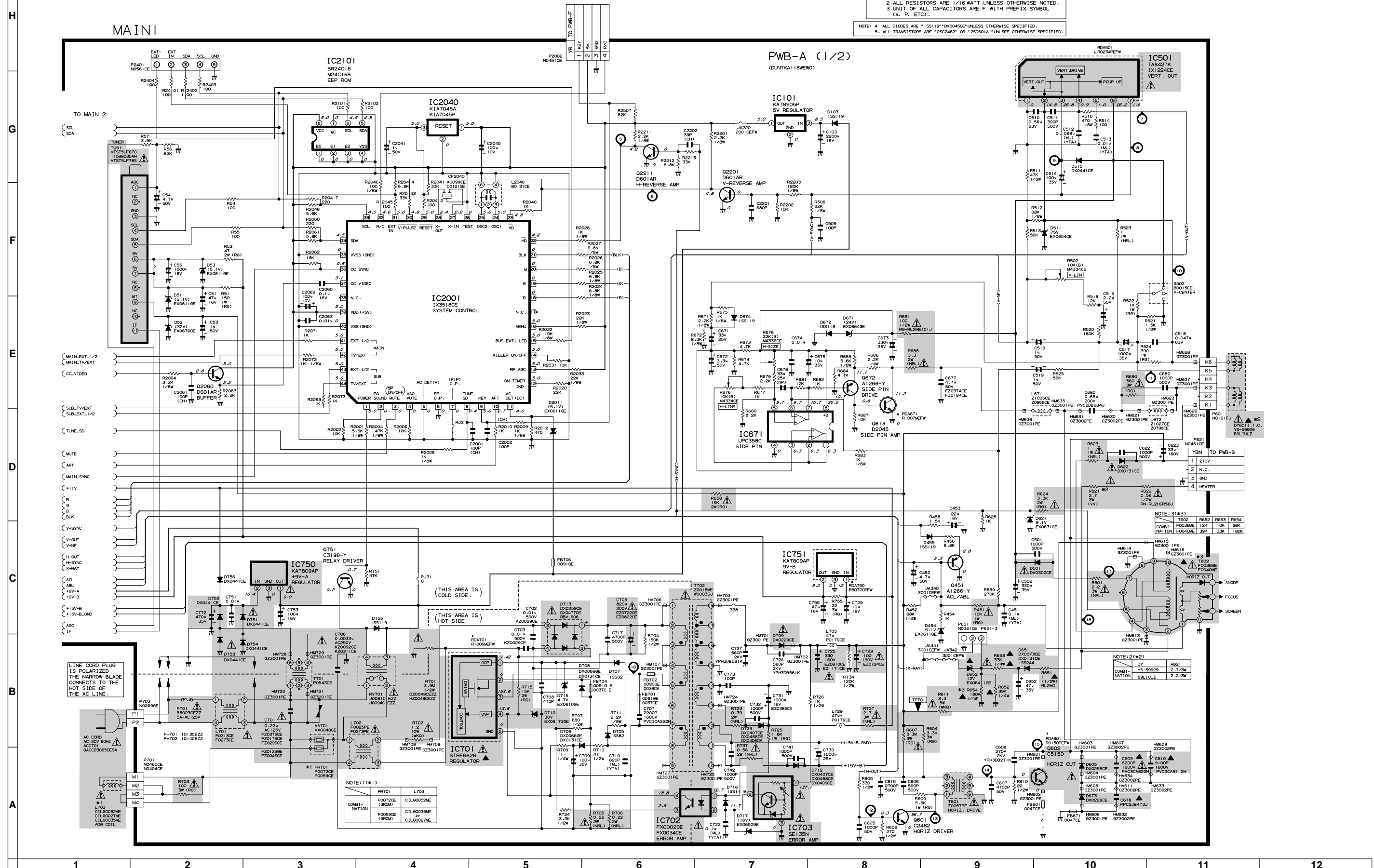
MODEL 36R-S50 SCHEMATIC DIAGRAM: MAIN-1 Unit



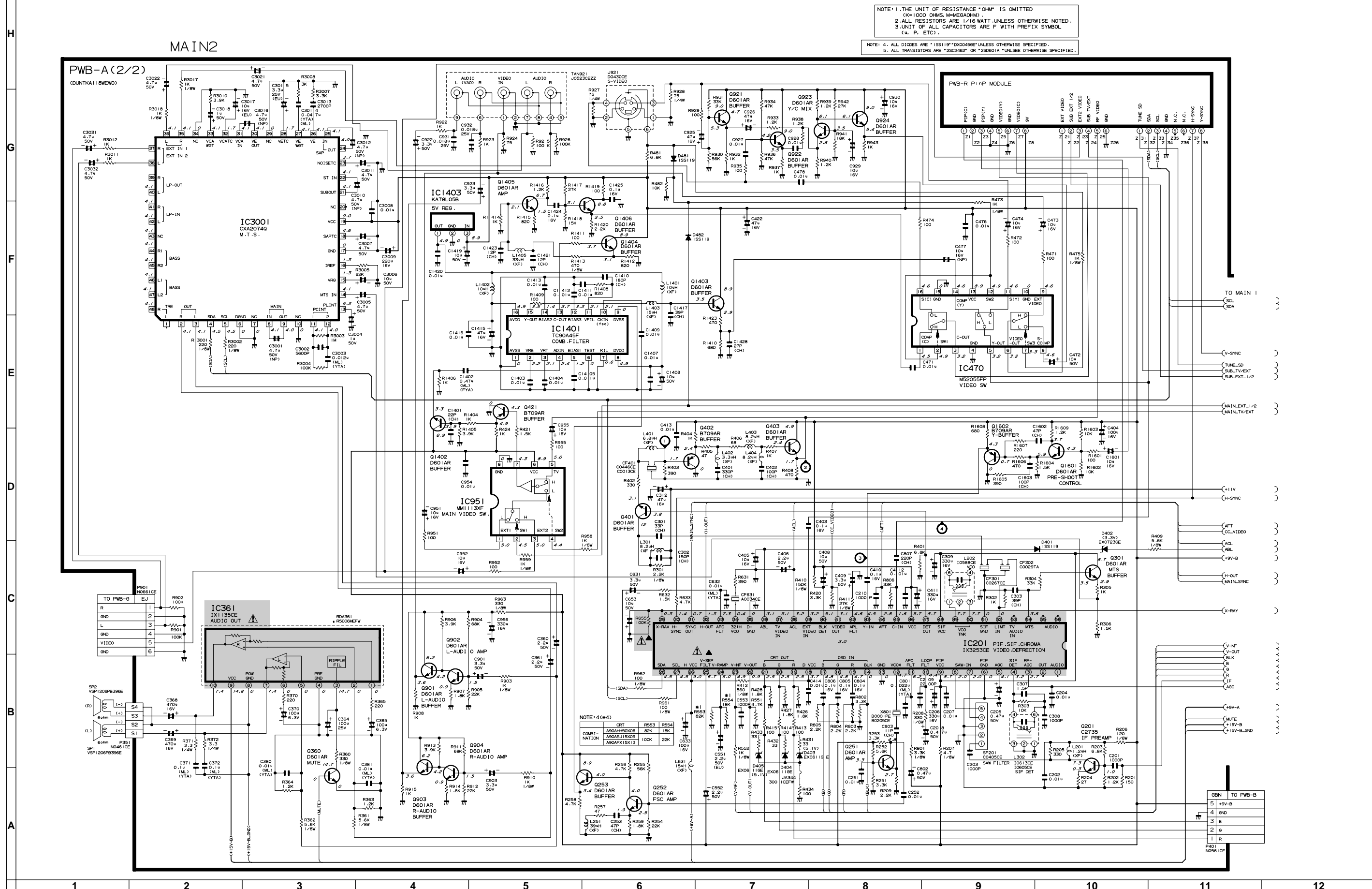
MODEL 36R-S50 SCHEMATIC DIAGRAM: MAIN-2 Unit



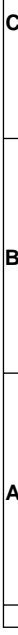
MODEL 36R-S400 SCHEMATIC DIAGRAM: MAIN-1 Unit



MODEL 36R-S400 SCHEMATIC DIAGRAM: MAIN-2 Unit



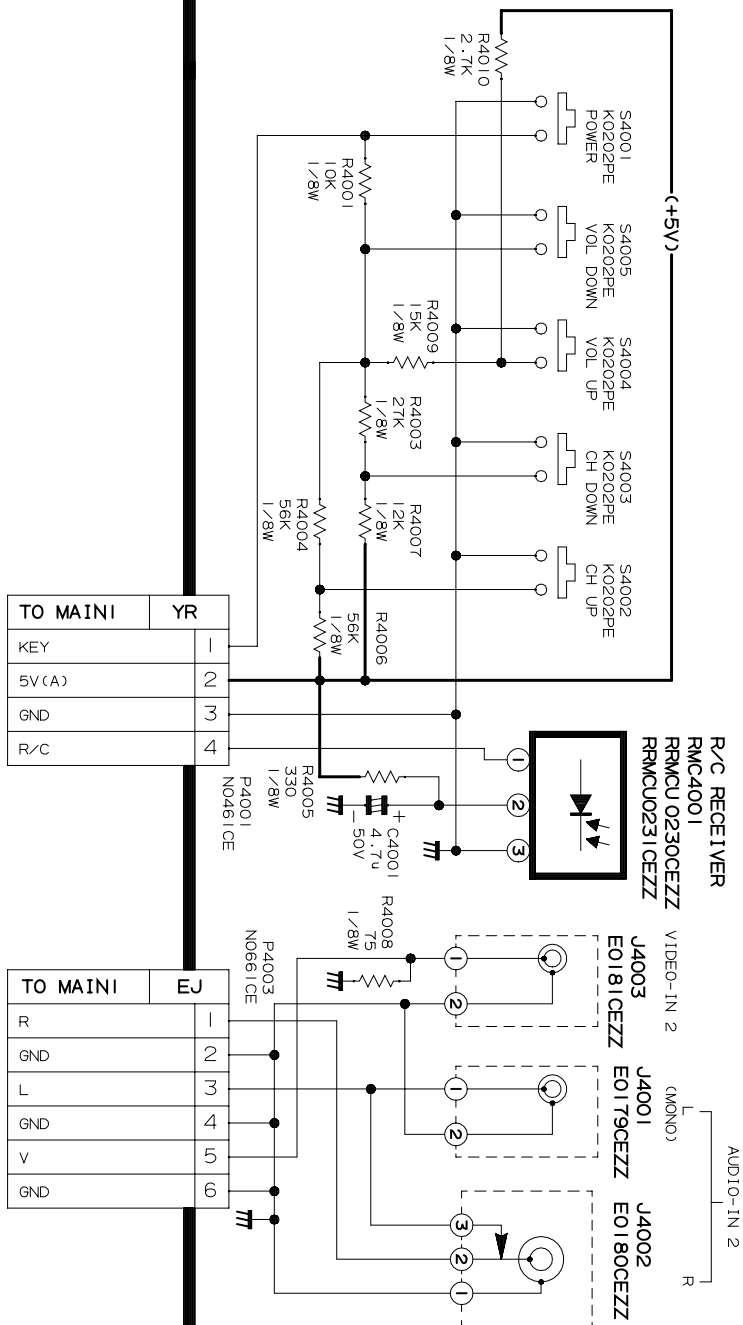
A
B
C
D
E
F
G
H



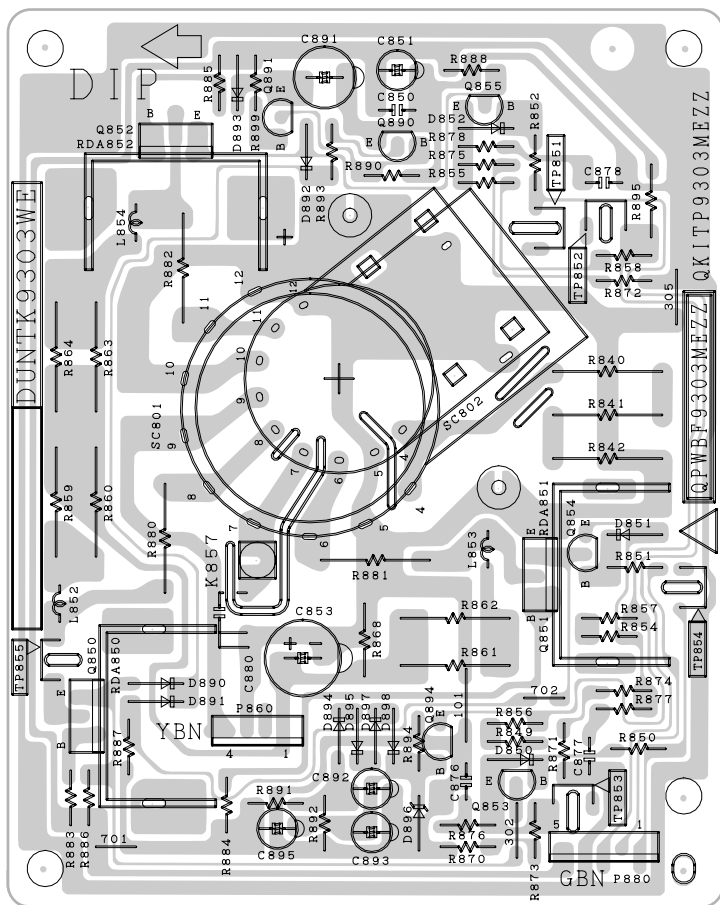
SCHEMATIC DIAGRAM: CONTROL Unit

CONTROL

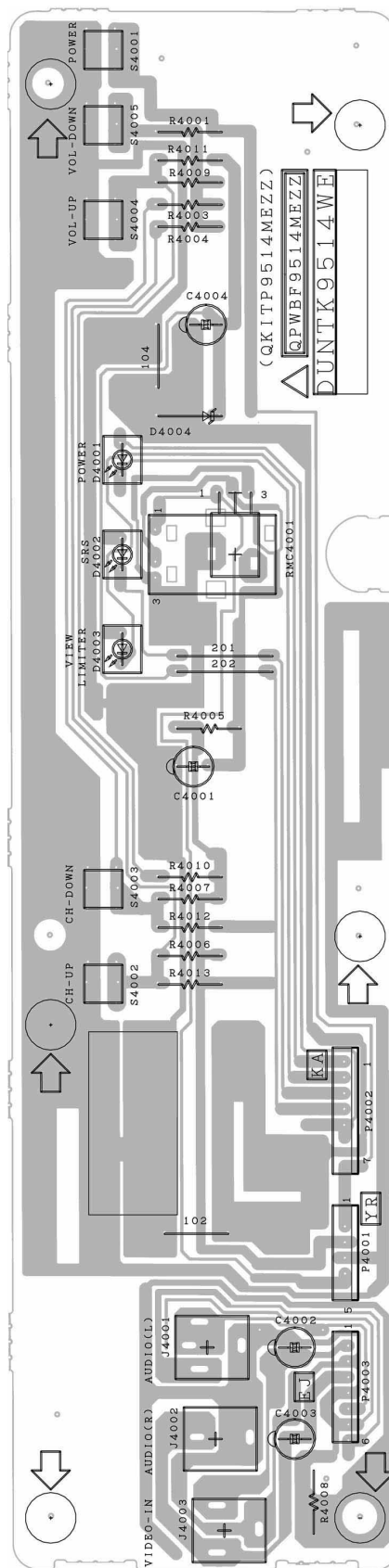
PWB-F
(DUNITK9514MEV4)



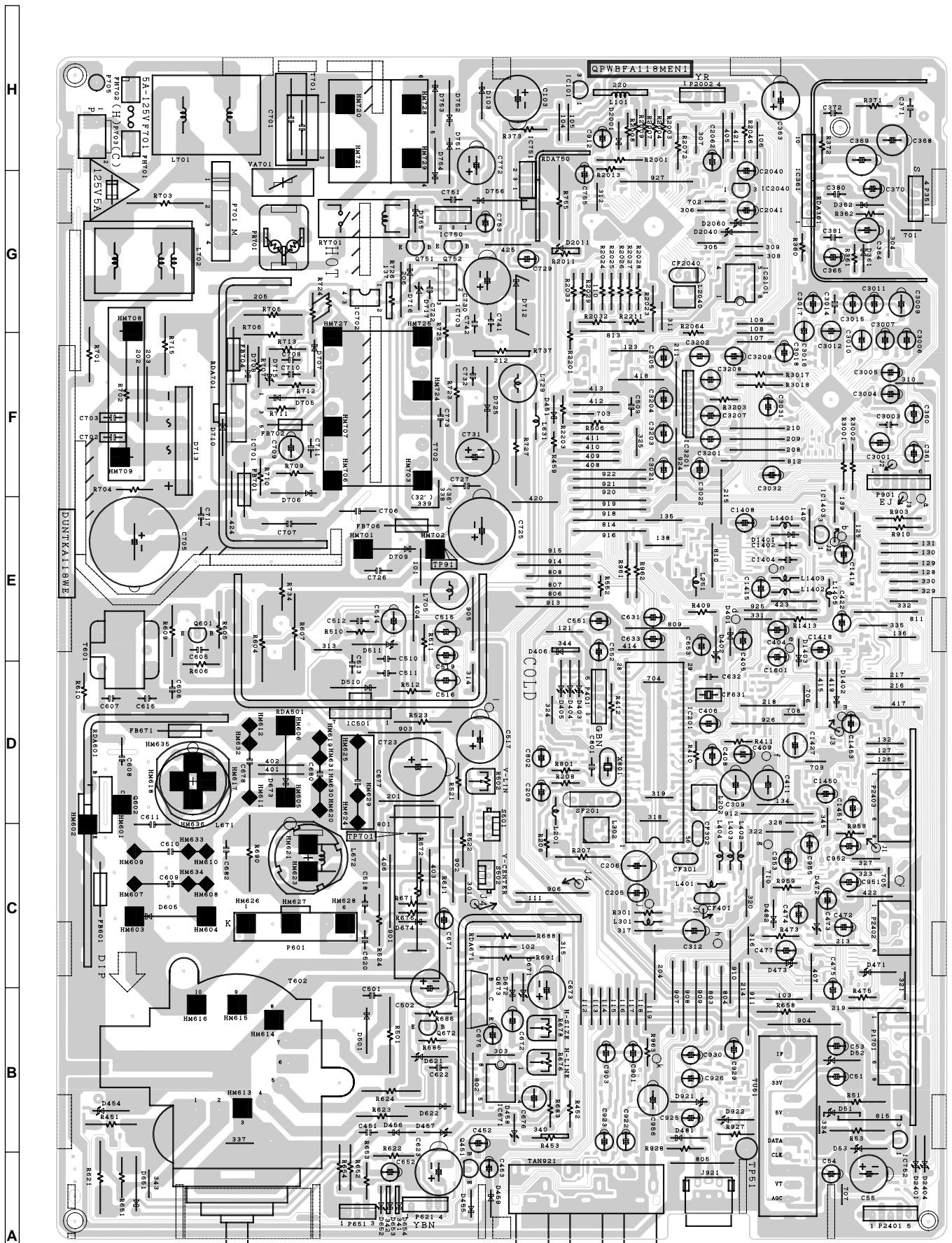
PRINTED WIRING BOARD ASSEMBLIES



PWB-B: CRT Unit (Wiring Side)



PWB-F: CONTROL Unit (Wiring Side)



PWB-A: MAIN Unit (Wiring Side)



PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual; electrical components having such features are identified by Δ and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does not have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO. |
| 3. PART NO. | 4. DESCRIPTION |

in **USA**: Contact your nearest SHARP Parts Distributor to order.
For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK: SPARE PARTS-DELIVERY SECTION

▲ MARK : X- RAY RELATED PARTS

Ref. No.	Part No.	★	Description	Code
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PICTURE TUBE

32R-S50, 32R-S400				
Δ	VB80LJF3015*S	X	CRT (I.T.C.)	CR
	or			
	VB80ECK272X1E		CRT (I.T.C.)	
	or			
	VB80ECK272X2E		CRT (I.T.C.)	
	or			
	VB80LJF30X/*S		CRT (DY601:H0108ME)	
	or			
	VB80JUA061X*S		CRT (DY601:H0109ME or H0104ME)	
▲ Δ DY601	RCiLH0108MEZZ	X	DY (CRT:A80LJF30X)	AZ
	or			
	RCiLH0109MEZZ		DY (CRT:A80JUA061X)	
	or			
	RCiLH0104MEZZ		DY (CRT:A80JUA061X)	
▲ L703	RCiLG0051MEZZ	X	Degaussing Coil (PR701:P0072CE)	AV
	or			
	RCiLG0028MEZZ		Degaussing Coil (PR701:P0059CE)	
	or			
	RCiLG0034MEZZ		Degaussing Coil (PR701:P0059CE)	
	MSPRT0002MEZZ	X	Spring for CRT	AE
	QEARC3102MEZZ	X	Grounding Strap	AG

	CRT	DY	C610	R621	C67B
COMBI-NATION	A80LJF30X	H0108ME	9100P/1.6KV	1.2/3W	0.047/400V
		H0109ME	.01 / 1.6KV	1.5/3W	
		H0104ME			
	A80LJF30X15	I.T.C.	9100P/1.6KV	1.2/3W	
	A80ECK272X96	I.T.C.	9100P/1.6KV	3.3/2W	0.039/400V
	A80ECK272X59				
COMBI-NATION	PR701	L703			
	P0072CE (3ROM)	CiL60051ME			
	P0059CE (5ROM)	CiL60034ME or CiL60028ME			

Ref. No. Part No. ★ Description Code

36R-S50, 36R-S400

Δ	VB90AHH5006*S	X	CRT (I.T.C.)	DD
	or			
	VB90AFX1513*S		CRT (I.T.C.)	
	or			
	VB90AEJ1509*S		CRT (I.T.C.)	
▲ L703	RCiLG0052MEZZ	X	Degaussing Coil (PR702:P0072CE)	AV
	or			
	RCiLG0027MEZZ		Degaussing Coil (PR702:P0059CE)	
	or			
	RCiLG0035MEZZ		Degaussing Coil (PR702:P0059CE)	
	MSPRT0002MEZZ	X	Spring for CRT	AE
	QEARC3502MEZZ	X	Grounding Strap	AG

	CRT	R621	R553	R554	R513	R502	R519	R520
COMBI-NATION	A90AHH50X06	2.7/3W	82K	18K	56K	10K(B)	12K	180K
	A90AEJ15X09	2.2/3W	100K	22K	47K	33K(B)	10K	150K
	A90AFX15X13							

	PR701	L703
COMBI-NATION	P0072CE (3ROM)	CiL60052ME
	P0059CE (5ROM)	CiL60035ME or CiL60027ME

PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

PWB-A DUNTKA118WEV5	—	MAIN Unit (32R-S50)	—
PWB-A DUNTKA118WEV7	—	MAIN Unit (32R-S400)	—
PWB-A DUNTKA118WEV8	—	MAIN Unit (36R-S50)	—
PWB-A DUNTKA118WEV0	—	MAIN Unit (36R-S400)	—
PWB-B DUNTK9303WEV0	—	CRT Unit (32R-S50/S400)	—
PWB-B DUNTK9303WEV1	—	CRT Unit (36R-S50/S400)	—
PWB-F DUNTK9514WEV4	—	CONTROL Unit	—
PWB-R DUNTK9511WEV8	—	P-IN-P Unit (32R-S400, 36R-S400)	—

Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA118WEV5 (32R-S50)				
PWB-A: DUNTKA118WEV7 (32R-S400)				
PWB-A: DUNTKA118WEV8 (36R-S50)				
PWB-A: DUNTKA118WEW0 (36R-S400)				
MAIN UNIT				

TUNER

NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

△ TU51	VTUVTST5UF670	X	Tuner	AX
	or			
	VTU115B8035AH			
	or			
	VTUVTST5UF78S			

INTEGRATED CIRCUITS

IC101	VHiKA78S05P-1	J	KA78S05P	AD
▲△ IC201	RH-iX3253CEZZ	J	TA1268AN	AV
△ IC361	RH-iX1135CEZZ	J	LA4261	AH
IC470	VHiM52055FP-1	J	M52055FP	AH
			(32R-S400, 36R-S400)	
△ IC501	VHiTA8427K/-1	J	TA8427K	AL
	or			
	RH-iX1224CEZZ			
IC671	VHiUPC358C/-1	J	UPC358C	AD
▲△ IC701	VHiSTRF66261E	J	STRF6626	AX
△ IC702	RH-FX0002GEZZ	J	PS2501-1	AD
	or			
	RH-FX0034CEZZ			
△ IC703	VHiSE125N//-1	X	SE125N	AK
			(32R-S50, 32R-S400)	
△ IC703	VHiSE135N//-1	J	SE135N	AG
			(36R-S400, 36R-S50)	
△ IC750	VHiKA7809AP-1	J	KA7809API	AE
IC751	VHiKA7809AP-1	J	KA7809API	AE
IC951	VHiMM1113XF1E	J	MM1113XFBE	AE
IC1401	VHiTC90A45F-1	J	TC90A45F	AM
IC1403	VHiKA78L05B-1	J	KA78L05BP	AE
IC2001	RH-iX3518CEZZQ	X	I.C.	AT
IC2040	VHiKiA7045A-1	J	KA7045A	AE
	or			
	VHiKiA7045P-1			
IC2101	VHiBR24C16/-1	J	I.C.	AL
	or			
	VHiM24C16B/-1			
IC3001	VHiCXA2074Q-1	J	CXA2074Q	AY

TRANSISTORS

You can substitute "VS2SC2462-C-1" for "VS2SD601AR/-1".

Q201	VS2SC2735//1E	J	2SC2735	AC
Q251	VS2SD601AR/-1	J	2SD601AR	AC
Q252	VS2SD601AR/-1	J	2SD601AR	AC
Q253	VS2SD601AR/-1	J	2SD601AR	AC
Q301	VS2SD601AR/-1	J	2SD601AR	AC
Q360	VS2SD601AR/-1	J	2SD601AR	AC
Q401	VS2SD601AR/-1	J	2SD601AR	AC
Q402	VS2SB709AR/-1	J	2SB709AR	AC
Q403	VS2SD601AR/-1	J	2SD601AR	AC
Q421	VS2SB709AR/-1	J	2SB709AR	AC
Q451	VS2SA1266-Y-1	J	2SA1266-Y	AA
Q601	VS2SC2482//1	J	2SC2482	AD
△ Q602	VS2SC5150//2E	X	2SC5150	AS
			(36R-S50, 36R-S400)	
△ Q602	VS2SD2500//2E	J	2SD2500	AT
	or		(32R-S50, 32R-S400)	
	VSBU2520AX/-1			
Q672	VS2SA1266-Y-1	J	2SA1266-Y	AA
Q673	VS2SD2045//1	J	2SD2045	AL
Q751	VS2SC3198-Y-1	J	2SC3198-Y	AA
Q901	VS2SD601AR/-1	J	2SD601AR	AC
			(32R-S400, 36R-S400)	
Q902	VS2SD601AR/-1	J	2SD601AR	AC
			(32R-S400, 36R-S400)	
Q903	VS2SD601AR/-1	J	2SD601AR	AC
			(32R-S400, 36R-S400)	

Ref. No.	Part No.	★	Description	Code
Q904	VS2SD601AR/-1	J	2SD601AR	AC
			(32R-S400, 36R-S400)	
Q921	VS2SD601AR/-1	J	2SD601AR	AC
			(32R-S400, 36R-S400)	
Q922	VS2SD601AR/-1	J	2SD601AR	AC
			(32R-S400, 36R-S400)	
Q923	VS2SD601AR/-1	J	2SD601AR	AC
			(32R-S400, 36R-S400)	
Q924	VS2SD601AR/-1	J	2SD601AR	AC
			(32R-S400, 36R-S400)	
Q1402	VS2SD601AR/-1	J	2SD601AR	AC
Q1403	VS2SD601AR/-1	J	2SD601AR	AC
Q1404	VS2SD601AR/-1	J	2SD601AR	AC
Q1405	VS2SD601AR/-1	J	2SD601AR	AC
Q1406	VS2SD601AR/-1	J	2SD601AR	AC
Q1601	VS2SD601AR/-1	J	2SD601AR	AC
Q1602	VS2SB709AR/-1	J	2SB709AR	AC
Q2060	VS2SD601AR/-1	J	2SD601AR	AC
Q2201	VS2SD601AR/-1	J	2SD601AR	AC
Q2211	VS2SD601AR/-1	J	2SD601AR	AC

DIODES

You can substitute "RH-DX0045GEZZ" for "VHD1SS119//1".

D51	RH-EX0611GEZZ	J	Zener Diode, 5.1V	AA
D52	RH-EX0676GEZZ	J	Zener Diode, 32V	AA
D53	RH-EX0611GEZZ	J	Zener Diode, 5.1V	AA
D103	VHD1SS119//1	J	Diode	AB
D401	VHD1SS119//1	J	Diode	AB
D402	RH-EX0723GEZZ	J	Zener Diode, 3.3V	AB
D403	RH-EX0611GEZZ	J	Zener Diode, 5.1V	AA
D404	RH-EX0611GEZZ	J	Zener Diode, 5.1V	AA
D405	RH-EX0611GEZZ	J	Zener Diode, 5.1V	AA
D454	RH-EX0611GEZZ	J	Zener Diode, 5.1V	AA
D455	VHD1SS119//1	J	Diode	AB
D481	VHD1SS119//1	J	Diode	AB
			(32R-S400, 36R-S400)	
D482	VHD1SS119//1	J	Diode	AB
			(32R-S400, 36R-S400)	
△ D501	RH-DX0302CEZZ	J	Diode	AC
D510	RH-DX0441CEZZ	J	Diode	AC
D511	RH-EX0654CEZZ	J	Zener Diode, 75V	AD
△ D605	RH-DX0255CEZZ	J	Diode	AC
D621	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
△ D622	RH-DX0131CEZZ	J	Diode	AC
▲△ D651	RH-DX0073CEZZ	J	Diode	AD
	or			
	RH-DX0131CEZZ			
	or			
	VHD1SS244//1			
▲△ D652	RH-EX0641GEZZ	J	Zener Diode, 12V	AA
▲△ D653	VHD1SS119//1	J	Diode	AB
			(32R-S50, 32R-S400)	
▲△ D654	VHD1SS119//1	J	Diode	AB
			(32R-S50, 32R-S400)	
D671	RH-EX0664GEZZ	J	Zener Diode, 24V	AA
D672	VHD1SS119//1	J	Diode	AB
△ D673	RH-DX0229CEZZ	J	Diode	AF
D674	VHD1SS119//1	J	Diode	AB
D705	VHD1SS82///1A	J	Diode	AC
D706	RH-DX0066GEZZ	J	Diode	AB
	or			
	RH-DX0131CEZZ			
D707	VHD1SS82///1A	J	Diode	AC
D708	RH-DX0066GEZZ	J	Diode	AB
	or			
	RH-DX0131CEZZ			
△ D709	RH-DX0229CEZZ	J	Diode	AF
△ D710	RH-EX0673GEZZ	J	Zener Diode, 30V	AB
△ D712	RH-DX0407CEZZ	J	Diode	AD
	or			
	RH-DX0468CEZZ			
	or			
	RH-DX0406CEZZ			
△ D713	RH-DX0259CEZZ	J	Diode	AH
	or			
	RH-DX0477CEZZ			

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA118WEV5 (32R-S50)					L1405	VP-XF330K0000	J	Peaking 33μH	AB
PWB-A: DUNTKA118WEV7 (32R-S400)					L2040	RCiLB0131CEZZ	J	Oscillation Coil	AE
PWB-A: DUNTKA118WEV8 (36R-S50)					TRANSFORMERS				
PWB-A: DUNTKA118WEW0 (36R-S400)					▲ T601	RTRNZ0057PEZZ	R	Transformer	AK
MAIN UNIT (Continued)					▲ T602	RTRNF0035MEZZ	X	H-Volt Transformer (32R-S50, 32R-S400)	AY
D715	RH-EX0610GEZZ	J	Zener Diode, 4.7V	AA		or			
D716	VHD1SS119/-1	J	Diode	AB		RTRNF0039MEZZ			
D717	RH-EX0650GEZZ	J	Zener Diode, 16V	AB	▲ T602	RTRNF0036MEZZ	X	H-Volt Transformer (36R-S50, 36R-S400)	AY
▲ D725	RH-DX0407CEZZ	J	Diode	AD		or			
	or					RTRNF0040MEZZ			
	RH-DX0468CEZZ				▲ T701	RTRNP0543CEZZ	J	Power Transformer	AM
	or				▲ T702	RTRNW0003GJZZ	X	Transformer	AP
	RH-DX0406CEZZ					or			
▲ D751	RH-DX0441CEZZ	J	Diode	AC		RTRNZ0018MEZZ			
▲ D752	RH-DX0441CEZZ	J	Diode	AC	32R-S50, 32R-S400				
▲ D753	RH-DX0441CEZZ	J	Diode	AC					
▲ D754	RH-DX0441CEZZ	J	Diode	AC		T602	R654		
D755	VHD1SS119/-1	J	Diode	AB	COMB I -	F0035ME	39K		
D756	RH-DX0441CEZZ	J	Diode	AC	NATION	F0039ME	33K		
D2001	VHD1SS119/-1	J	Diode (32R-S50, 36R-S50)	AB	36R-S50, 36R-S400				
D2011	RH-EX0611GEZZ	J	Zener Diode, 5.1V	AA					
▲ VA701	RH-VX0048CEZZ	J	Varistor	AE		T602	R652	R653	R654
					COMB I -	F0036ME	12K	10K	68K
					NATION	F0040ME	39K	33K	180K
PACKAGED CIRCUITS					CONTROLS				
▲ PR701	RMPTP0072CEZZ	J	Packaged Circuit	AH	R502	RVR-M4334CEZZ	J	10k(B) V-Line.	AC
	or				R676	RVR-M4334CEZZ	J	10k(B) H-Line.	AC
X801	RCRSB0001PEZZ	R	Crystal	AL	R678	RVR-M4336CEZZ	J	22k(B) H-Size	AC
	or				CAPACITORS				
	RCRSB0205CEZZ				[EL... Electrolytic, M-Poly... Metalized Polypro Film]				
FILTERS					C51	VCEA0A1CW476M	J	47 16V EL.	AB
CF301	RFiLC0267CEZZ	J	Ceramic Filter	AD	C53	VCEA0A1HW105M	J	1.0 50V EL.	AB
CF302	RFiLC0029TAZZ	J	Ceramic Filter	AD	C54	VCEA0A1HW475M	J	4.7 50V EL.	AB
CF401	RFiLC0446CEZZ	J	Ceramic Filter	AD	C55	VCEA0A1CW108M	J	1000 16V EL.	AD
	or				C103	VCEA0A1CW228M	J	2200 16V EL.	AD
	RCiLC0013CEZZ				C201	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
CF631	RFiLA0034CEZZ	J	Ceramic Filter	AD	C202	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
CF2040	RFiLA0099CEZZ	J	Ceramic Filter	AE	C203	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
	or				C204	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
	RFiLC0121GEZZ				C205	VCEA0A1HW474M	J	0.47 50V EL.	AB
SF201	RFiLC0405CEZZ	J	SAW Filter	AH	C206	VCEA0A1CW337M	J	330 16V EL.	AC
COILS					C207	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
L201	VP-XF1R2K0000	J	Peaking 1.2μH	AB	C208	VCEA0A1HW474M	J	0.47 50V EL.	AB
L202	RCiLi0588CEZZ	J	IF Coil	AF	C209	VCKYCY1HB222K	J	2200p 50V Ceramic	AA
L251	VP-XF390K0000	J	Peaking 39μH	AB	C210	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
L301	VP-XF8R2K0000	J	Peaking 8.2μH	AB	C251	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
L302	RCiLi0613CEZZ	J	IF Coil	AE	C252	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
	or				C253	VCCCCY1HH470J	J	47p 50V Ceramic	AA
	RCiLi0605CEZZ				C301	VCCCCY1HH330J	J	33p 50V Ceramic	AA
L401	VP-XF6R8K0000	J	Peaking 6.8μH	AB	C302	VCCCCY1HH151J	J	150p 50V Ceramic	AA
L402	VP-XF3R3K0000	J	Peaking 3.3μH	AB	C303	VCCCCY1HH390J	J	39p 50V Ceramic	AA
L403	VP-XF8R2K0000	J	Peaking 8.2μH	AB	C307	VCCCCY1HH1R5C	J	1.5p 50V Ceramic	AD
L404	VP-XF8R2K0000	J	Peaking 8.2μH	AB	C308	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
L631	VP-XF150K0000	J	Peaking 15μH	AB	C309	VCEA0A1CW337M	J	330 16V EL.	AC
L671	RCiLZ1005CEZZ	J	Coil	AH	C312	VCEA0A1CW476M	J	47 16V EL.	AB
	or				C360	VCEA0A1HW225M	J	2.2 50V EL.	AB
	RCiLZ0868CEZZ				C361	VCEA0A1HW225M	J	2.2 50V EL.	AB
L672	RCiLZ1027CEZZ	J	Coil	AE	C364	VCEA0A1EW107M	J	100 25V EL.	AC
	or				C365	VCEA0A0JW107M	J	100 6.3V EL.	AB
	RCiLZ0798CEZZ				C368	VCEA0A1CW477M	J	470 16V EL.	AC
▲ L701	RCiLF0313CEZZ	J	Coil	AH	C369	VCEA0A1CW477M	J	470 16V EL.	AC
	or				C370	VCEA0A0JW107M	J	100 6.3V EL.	AB
	RCiLF0273CEZZ				C371	VCQYTA1HM104K	J	0.1 50V Mylar	AC
▲ L702	RCiLF0025PEZZ	R	Coil	AK	C372	VCQYTA1HM104K	J	0.1 50V Mylar	AC
	or				C380	VCQYTA1HM103K	J	0.01 50V Mylar	AB
	RFiLF0273PEZZ				C381	VCQYTA1HM103K	J	0.01 50V Mylar	AB
L705	RCiLP0179CEZZ	J	Coil	AD	C401	VCKYCY1HB331K	J	330p 50V Ceramic	AA
L729	RCiLP0179CEZZ	J	Coil	AD	C402	VCCCCY1HH101J	J	100p 50V Ceramic	AA
L1401	VP-XF100K0000	J	Peaking 10μH	AB	C403	VCKYCY1CB104K	J	0.1 16V Ceramic	AB
L1402	VP-XF100K0000	J	Peaking 10μH	AB	C404	VCEA0A1CW107M	J	100 16V EL.	AC
L1403	VP-XF150K0000	J	Peaking 15μH	AB	C405	VCEA0A1CW106M	J	10 16V EL.	AB

Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA118WEV5 (32R-S50)				
PWB-A: DUNTKA118WEV7 (32R-S400)				
PWB-A: DUNTKA118WEV8 (36R-S50)				
PWB-A: DUNTKA118WEW0 (36R-S400)				
MAIN UNIT (Continued)				
C406	VCEA0A1HW225M	J	2.2 50V EL.	AB
C408	VCEA0A1HW106M	J	10 50V EL.	AB
C409	VCEA0A1HW335M	J	3.3 50V EL.	AB
C410	VCKYCY1CB104K	J	0.1 16V Ceramic	AB
C411	VCEA0A1CW337M	J	330 16V EL.	AC
C412	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C413	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C414	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C422	VCEA0A1CW476M	J	47 16V EL.	AB
C451	VCQYTA1HM104K	J	0.1 50V Mylar	AC
C452	VCEA0A1HW475M	J	4.7 50V EL.	AB
C453	VCEA0A1CW226M	J	22 16V EL.	AB
C471	VCKYCY1HB103K	J	0.01 50V Ceramic (32R-S400, 36R-S400)	AA
C472	VCEA0A1HW106M	J	10 50V EL. (32R-S400, 36R-S400)	AB
C473	VCEA0A1CW106M	J	10 16V EL. (32R-S400, 36R-S400)	AB
C474	VCEA0A1CW106M	J	10 16V EL. (32R-S400, 36R-S400)	AB
C476	VCKYCY1HB103K	J	0.01 50V Ceramic (32R-S400, 36R-S400)	AA
C477	VCE9GA1CW106M	J	10 16V EL. (N.P) (32R-S400, 36R-S400)	AB
C478	VCKYCY1HB103K	J	0.01 50V Ceramic (32R-S400, 36R-S400)	AA
C501	VCKYPA2HB102K	J	1000p 500V Ceramic	AA
C502	VCEA0A1VW337M	J	330 35V EL.	AD
C509	VCCSPA1HL101J	J	100p 50V Ceramic	AA
C510	VCIFYSA1JB564J	J	0.56 63V Mylar	AE
C511	VCKYPA2HB391K	J	390p 500V Ceramic	AA
C512	VCQYTA1HM683J	J	0.068 50V Mylar	AB
C513	VCQYTA1HM103K	J	0.01 50V Mylar	AB
C514	VCEA0A1VW107M	J	100 35V EL.	AC
C515	VCEACA1HC225J	J	2.2 50V EL.	AC
C516	VCEACA1HC105J	J	1.0 50V EL.	AB
C517	VCEA0A1VW108M	J	1000 35V EL.	AD
C518	VCIFYSA1JB473J	J	0.047 63V Mylar	AC
C519	VCEA0A1HW105M	J	1.0 50V EL.	AB
C551	VCEACA1HC225J	J	2.2 50V EL.	AC
C552	VCEA0A1HW225M	J	2.2 50V EL.	AB
C553	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C605	VCKYPA1HB102K	J	1000p 50V Ceramic	AA
C606	VCKYPA2HB561K	J	560p 500V Ceramic	AA
C607	VCKYPA1HB472K	J	4700p 50V Ceramic	AA
C608	RC-KZ0033CEZZ	J	150p 2kV Ceramic (32R-S50, 32R-S400)	AB
C608	VCKYPH3DB271K	J	270p 2kV Ceramic (36R-S50, 36R-S400)	AC
▲▲ C609	VCFPVC3CA822H	J	8200p 1.6kV M-Poly. (36R-S50, 36R-S400)	AE
▲▲ C609	VCFPVC3CA912H	J	9100p 1.6kV M-Poly. (32R-S50, 32R-S400)	AE
▲▲ C610	VCFPVC3CA912H	J	9100p 1.6kV M-Poly.	AE
C615	VCKYPA2HB272K	J	2700p 500V Ceramic	AA
C622	VCKYPA2HB102K	J	1000p 500V Ceramic	AA
C623	VCEA0A2CW336M	J	33 160V EL.	AE
C631	VCEA0A1HW335M	J	3.3 50V EL.	AB
C632	VCQYTA1HM103K	J	0.01 50V Mylar	AB
C633	VCEA0A1CW107M	J	100 16V EL.	AC
C652	VCEA0A1VW476M	J	47 35V EL.	AB
▲ C653	VCEA0A1HW106M	J	10 50V EL.	AB
C671	VCEA0A1EW336M	J	33 25V EL.	AB
C672	VCEACA1HC335J	J	3.3 50V EL.	AC
C673	VCEA0A1VW337M	J	330 35V EL.	AD
C674	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C675	VCEA0A1VW106M	J	10 35V EL.	AB
C676	VCE9GA1EW336M	J	33 25V EL. (N.P)	AB

Ref. No.	Part No.	★	Description	Code
C677	RC-FZ0374CEZZ	J	47 50V Mylar	AF
	or			
▲▲ C678	RC-FZ0184CEZZ	J	0.047 400V M-Poly. (32R-S50, 32R-S400)	AB
▲▲ C678	VCQPPC2GB473J	J	0.047 630V M-Poly. (36R-S50, 36R-S400)	AC
C680	VCFPVC2DB684J	X	0.68 200V M-Poly.	AG
C682	VCKYPA2HB102K	J	1000p 500V Ceramic	AA
▲ C701	RC-FZ037SCEZZ	J	0.221 AC125V Plastic	AD
	or			
	RC-FZ017SCEZZ			
	or			
	RC-FZ029SCEZZ			
	or			
	RC-FZ012SGEZZ			
	or			
C702	RC-FZ004SCEZZ	J	0.01 500V Ceramic	AC
C703	RC-KZ0029CEZZ	J	0.01 500V Ceramic	AC
▲ C705	RC-EZ0720CEZZ	J	680 200V EL. (32R-S50, 32R-S400)	AN
	or			
▲ C705	RC-EZ0801CEZZ	X	820 200V EL. (36R-S50, 36R-S400)	AN
	or			
▲ C706	RC-EZ0722CEZZ	J	0.033 AC250V Ceramic	AC
	or			
	RC-EZ0802CEZZ			
	or			
C707	RC-KZ0092GEZZ	J	0.033 AC250V Ceramic	AC
	or			
C707	RC-KZ0311CEZZ	J	2200p 1.6kV M-Poly.	AE
C708	VCFPVC3CA222H	J	470p 50V Ceramic	AA
C709	VCCSPA1HL471J	J	470p 50V Ceramic	AA
C709	VCEA0A1VW107M	J	100 35V EL.	AC
C710	VCQYTA1HM821J+	X	820p 50V Mylar	AE
C717	VCKYPA2HB472K	J	4700p 500V Ceramic	AB
C722	VCQYTA1HM104K	J	0.1 50V Mylar	AC
▲ C723	RC-EZ0724CEZZ	J	100 160V EL.	AG
▲ C725	RC-EZ0810CEZZ	X	330 160V EL.	AL
	or			
	RC-EZ1171CEZZ			
C726	VCKYPH3DB561K	J	560p 2kV Ceramic	AC
C727	VCKYPH3DB561K	J	560p 2kV Ceramic	AC
C729	VCEA0A1CW106M	J	10 16V EL.	AB
C730	VCEA4A1EN108M	J	1000 25V EL.	AD
C731	RC-EZ0385CEZZ	J	1000 16V EL.	AE
C732	VCKYPA2HB102K	J	1000p 500V Ceramic	AA
C741	VCKYPA2HB102K	J	1000p 500V Ceramic	AA
C742	VCKYPA2HB102K	J	1000p 500V Ceramic	AA
C751	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C753	VCEA0A1CW107M	J	100 16V EL.	AC
C755	VCEA0A1CW476M	J	47 16V EL.	AB
▲ C772	VCEA0A1VW477M	J	470 35V EL.	AB
C773	VCCSPA1HL101J	J	100p 50V Ceramic	AA
C801	VCQYTA1HM223K	J	0.022 50V Mylar	AB
C802	VCEA0A1HW474M	J	0.47 50V EL.	AB
C803	VCCCCY1HH110J	J	11p 50V Ceramic	AA
C804	VCKYCY1CB104K	J	0.1 16V Ceramic	AB
C805	VCKYCY1CB104K	J	0.1 16V Ceramic	AB
C806	VCKYCY1CB104K	J	0.1 16V Ceramic	AB
C807	VCCCCY1HH221J	J	220p 50V Ceramic	AA
C901	VCEA0A1HW335M	J	3.3 50V EL. (32R-S400, 36R-S400)	AB
C903	VCEA0A1HW335M	J	3.3 50V EL. (32R-S400, 36R-S400)	AB
C922	VCEA0A1HW335M	J	3.3 50V EL. (32R-S400, 36R-S400)	AB
C923	VCEA0A1HW335M	J	3.3 50V EL. (32R-S400, 36R-S400)	AB
C925	VCEA0A1CW476M	J	47 16V EL. (32R-S400, 36R-S400)	AB
C926	VCEA0A1CW476M	J	47 16V EL. (32R-S400, 36R-S400)	AB
C927	VCKYCY1HB103K	J	0.01 50V Ceramic (32R-S400, 36R-S400)	AA
C928	VCKYCY1HB103K	J	0.01 50V Ceramic (32R-S400, 36R-S400)	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA118WEV5 (32R-S50)					C3022	VCEA0A1HW475M	J 4.7	50V EL.	AB
PWB-A: DUNTKA118WEV7 (32R-S400)					C3031	VCEA0A1HW475M	J 4.7	50V EL.	AB
PWB-A: DUNTKA118WEV8 (36R-S50)					C3032	VCEA0A1HW475M	J 4.7	50V EL.	AB
PWB-A: DUNTKA118WEW0 (36R-S400)					RESISTORS				
MAIN UNIT (Continued)					<i>[M-Ox... Metal Oxide, M-Film... Metal Film]</i>				
C929	VCEA0A1CW106M	J	10 16V EL.	AB	RJ2	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C930	VCEA0A1CW106M	J	10 16V EL.	AB				(32R-S400, 36R-S400)	
C931	VCKYCY1EB183K	J	0.018 25V Ceramic	AA	RJ3	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C932	VCKYCY1EB183K	J	0.018 25V Ceramic	AA	RJ7	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C951	VCEA0A1CW106M	J	10 16V EL.	AB				(32R-S50)	
C952	VCEA0A1CW106M	J	10 16V EL.	AB	RJ10	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C954	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA				(32R-S50, 36R-S50)	
C955	VCEA0A1CW106M	J	10 16V EL.	AB	RJ19	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C956	VCEA0A1CW337M	J	330 16V EL.	AC	RJ20	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
			(32R-S400, 36R-S400)		RJ21	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1401	VCCCCY1HH220J	J	22p 50V Ceramic	AA	RJ22	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1402	VCFYFA1HA474J	J	0.47 50V Mylar	AC	RJ23	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1403	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ24	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1404	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA	RJ25	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1405	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ27	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1407	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ28	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1408	VCEA0A1HW106M	J	10 50V EL.	AB	RJ29	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1409	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ30	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1410	VCCCCY1HH181J	J	180p 50V Ceramic	AA	RJ31	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1411	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ32	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1412	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ33	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1413	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ35	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1415	VCEA0A1CW476M	J	47 16V EL.	AB	RJ36	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1416	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ37	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1417	VCCCCY1HH390J	J	39p 50V Ceramic	AA	RJ38	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1419	VCEA0A1HW106M	J	10 50V EL.	AB	RJ39	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1420	VCKYCY1HB103K	J	0.01 50V Ceramic	AA	RJ42	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1421	VCCCCY1HH120J	J	12p 50V Ceramic	AA	RJ43	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1423	VCCCCY1HH120J	J	12p 50V Ceramic	AA	R51	VRS-RG3AB151J+	X 150	1W M-Ox.	AE
C1424	VCKYCY1CB104K	J	0.1 16V Ceramic	AB	R53	VRS-RG3DB470J+	X 47	2W M-Ox.	AE
C1425	VCKYCY1CB104K	J	0.1 16V Ceramic	AB	R54	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
C1428	VCCCCY1HH270J	J	27p 50V Ceramic	AA	R55	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
C1601	VCEA0A1CW106M	J	10 16V EL.	AB	R56	VRS-CY1JF823J	J 82k	1/16W M-Ox.	AA
C1602	VCCCCY1HH470J	J	47p 50V Ceramic	AA	R57	VRS-CY1JF392J	J 3.9k	1/16W M-Ox.	AA
C1603	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R201	VRS-CY1JF151J	J 150	1/16W M-Ox.	AA
C2001	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R202	VRS-CY1JF122J	J 1.2k	1/16W M-Ox.	AA
C2002	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R203	VRS-CY1JF682J	J 6.8k	1/16W M-Ox.	AA
C2040	VCEA0A1AW107M	J	100 10V EL.	AB	R204	VRS-CY1JF270J	J 27	1/16W M-Ox.	AA
C2041	VCEA0A1HW105M	J	1.0 50V EL.	AB	R205	VRS-CY1JF331J	J 330	1/16W M-Ox.	AA
C2060	VCKYCY1CB104K	J	0.1 16V Ceramic	AB	R206	VRD-RA2BE121J	J 120	1/8W Carbon	AA
C2061	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R207	VRD-RA2BE4R7J	J 4.7	1/8W Carbon	AA
C2062	VCEA0A1AW107M	J	100 10V EL.	AB	R208	VRD-RA2BE331J	J 330	1/8W Carbon	AA
C2063	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R209	VRS-CY1JF222J	J 2.2k	1/16W M-Ox.	AA
C2201	VCKYCY1HB681K	J	680p 50V Ceramic	AA	R251	VRS-CY1JF332J	J 3.3k	1/16W M-Ox.	AA
C2202	VCCCCY1HH390J	J	39p 50V Ceramic	AA	R252	VRS-CY1JF562J	J 5.6k	1/16W M-Ox.	AA
C3001	VCE9GA1HW475M	J	4.7 50V EL. (N.P)	AB	R253	VRS-CY1JF332J	J 3.3k	1/16W M-Ox.	AA
C3002	VCKYCY1HB562K	J	5600p 50V Ceramic	AA	R254	VRS-CY1JF223J	J 22k	1/16W M-Ox.	AA
C3003	VCQYTA1HM123K	J	0.012 50V Mylar	AA	R255	VRS-CY1JF563J	J 56k	1/16W M-Ox.	AA
C3004	VCEA0A1HW105M	J	1.0 50V EL.	AB	R256	VRS-CY1JF472J	J 4.7k	1/16W M-Ox.	AA
C3005	VCEA0A1HW475M	J	4.7 50V EL.	AB	R257	VRS-CY1JF470J	J 47	1/16W M-Ox.	AA
C3006	VCEA0A1HW106M	J	10 50V EL.	AB	R258	VRS-CY1JF472J	J 4.7k	1/16W M-Ox.	AA
C3007	VCEA0A1HW475M	J	4.7 50V EL.	AB	R259	VRS-CY1JF182J	J 1.8k	1/16W M-Ox.	AA
C3008	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R301	VRD-RA2BE222J	J 2.2k	1/8W Carbon	AA
C3009	VCEA0A1CW227M	J	220 16V EL.	AC	R302	VRS-CY1JF102J	J 1.0k	1/16W M-Ox.	AA
C3010	VCE9GA1HW475M	J	4.7 50V EL. (N.P)	AB	R303	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
C3011	VCEA0A1HW475M	J	4.7 50V EL.	AB	R304	VRS-CY1JF333J	J 33k	1/16W M-Ox.	AA
C3012	VCE9GA1HW475M	J	4.7 50V EL. (N.P)	AB	R305	VRS-CY1JF102J	J 1.0k	1/16W M-Ox.	AA
C3013	VCKYCY1HB272K	J	2700p 50V Ceramic	AA	R306	VRS-CY1JF152J	J 1.5k	1/16W M-Ox.	AA
C3014	VCQYTA1HM473K	J	0.047 50V Mylar	AB	R360	VRD-RA2BE331J	J 330	1/8W Carbon	AA
C3015	VCEACA1EC335J+	X	3.3 25V EL.	AF	R361	VRD-RA2BE562J	J 5.6k	1/8W Carbon	AA
C3016	VCE9GA1HW475M	J	4.7 50V EL. (N.P)	AB	R362	VRD-RA2BE562J	J 5.6k	1/8W Carbon	AA
C3017	VCEACA1CC106J+	X	10 16V EL.	AF	R363	VRS-CY1JF122J	J 1.2k	1/16W M-Ox.	AA
C3018	VCEA0A1HW105M	J	1.0 50V EL.	AB	R364	VRS-CY1JF122J	J 1.2k	1/16W M-Ox.	AA
C3021	VCEA0A1HW475M	J	4.7 50V EL.	AB	R365	VRS-CY1JF221J	J 220	1/16W M-Ox.	AA
					R370	VRS-CY1JF221J	J 220	1/16W M-Ox.	AA
					R371	VRD-RA2EE3R3J	J 3.3	1/4W Carbon	AA
					R372	VRD-RA2EE3R3J	J 3.3	1/4W Carbon	AA
					R401	VRS-CY1JF682J	J 6.8k	1/16W M-Ox.	AA
					R402	VRS-CY1JF331J	J 330	1/16W M-Ox.	AA

Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA118WEV5 (32R-S50)				
PWB-A: DUNTKA118WEV7 (32R-S400)				
PWB-A: DUNTKA118WEV8 (36R-S50)				
PWB-A: DUNTKA118WEW0 (36R-S400)				
MAIN UNIT (Continued)				
R403	VRS-CY1JF391J	J	390 1/16W M-Ox.	AA
R404	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R405	VRS-CY1JF470J	J	47 1/16W M-Ox.	AA
R406	VRS-CY1JF680J	J	68 1/16W M-Ox.	AA
R407	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R408	VRS-CY1JF471J	J	470 1/16W M-Ox.	AA
R409	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R410	VRD-RA2BE154J	J	150k 1/8W Carbon	AA
R411	VRD-RA2BE273J	J	27k 1/8W Carbon	AA
R412	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R413	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R414	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R415	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R420	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R421	VRS-CY1JF152J	J	1.5k 1/16W M-Ox.	AA
R424	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R426	VRS-CY1JF182J	J	1.8k 1/16W M-Ox.	AA
R427	VRS-CY1JF182J	J	1.8k 1/16W M-Ox.	AA
R428	VRS-CY1JF182J	J	1.8k 1/16W M-Ox.	AA
R431	VRS-CY1JF330J	J	33 1/16W M-Ox.	AA
R432	VRS-CY1JF330J	J	33 1/16W M-Ox.	AA
R433	VRS-CY1JF330J	J	33 1/16W M-Ox.	AA
R434	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
△ R451	VRS-RG3AB103J	J	10k 1W M-Ox.	AB
R452	VRD-RM2HD683J	J	68k 1/2W Carbon	AA
R453	VRD-RA2EE682J	J	6.8k 1/4W Carbon	AA
			(32R-S50, 32R-S400)	
R454	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R456	VRS-CY1JF682J	J	6.8k 1/16W M-Ox.	AA
R458	VRS-CY1JF152J	J	1.5k 1/16W M-Ox.	AA
R471	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
			(32R-S400, 36R-S400)	
R472	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
			(32R-S400, 36R-S400)	
R473	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
			(32R-S400, 36R-S400)	
R474	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
			(32R-S400, 36R-S400)	
R475	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
			(32R-S400, 36R-S400)	
R481	VRS-CY1JF682J	J	6.8k 1/16W M-Ox.	AA
			(32R-S400, 36R-S400)	
R482	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
			(32R-S400, 36R-S400)	
△ R501	VRN-RL3LB2R2J+	X	2.2 3W M-Film	AF
R506	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R510	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R511	VRD-RA2BE393J	J	39k 1/8W Carbon	AA
			(32R-S50, 32R-S400)	
R511	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
			(36R-S50, 36R-S400)	
R512	VRD-RA2BE683J	J	68k 1/8W Carbon	AA
R513	VRS-CY1JF273J	J	27k 1/16W M-Ox.	AA
			(32R-S50, 32R-S400)	
R513	VRS-CY1JF563J	J	56k 1/16W M-Ox.	AA
			(36R-S50, 36R-S400)	
R514	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R519	VRS-CY1JF123J	J	12k 1/16W M-Ox.	AA
R520	VRS-CY1JF184J	J	180k 1/16W M-Ox.	AA
R521	VRD-RM2HD152J	J	1.5k 1/2W Carbon	AA
R522	VRS-RG3AB102J+	X	1.0k 1W M-Ox.	AE
R523	VRN-RL3AB1R0J+	X	1.0 1W M-Film	AE
			(36R-S50, 36R-S400)	
R523	VRN-RL3AB1R2J	X	1.2 1W M-Film	AE
			(32R-S50, 32R-S400)	
R524	VRS-RG3AB391J+	X	390 1W M-Ox.	AE
R525	VRS-CY1JF563J	J	56k 1/16W M-Ox.	AA
R551	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA

Ref. No.	Part No.	★	Description	Code
R552	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R553	VRS-CY1JF823J	J	82k 1/16W M-Ox.	AA
R554	VRS-CY1JF183J	J	18k 1/16W M-Ox.	AA
△ R604	VRS-RG3LB222J+	X	2.2k 3W M-Ox.	AF
			(32R-S50, 32R-S400)	
△ R604	VRS-RG3LB332J+	X	3.3k 3W M-Ox.	AF
			(36R-S50, 36R-S400)	
R605	VRD-RM2HD331J	J	330 1/2W Carbon	AA
R606	VRD-RM2HD271J	J	270 1/2W Carbon	AA
△ R607	VRS-RG3LB222J+	X	2.2k 3W M-Ox.	AF
			(32R-S50, 32R-S400)	
△ R607	VRS-RG3LB332J+	X	3.3k 3W M-Ox.	AF
			(36R-S50, 36R-S400)	
R609	VRS-RG3AB562J+	X	5.6k 1W M-Ox.	AE
R610	VRD-RM2HD220J	J	22 1/2W Carbon	AA
△ R611	VRW-KQ41C3R3K	J	3.3 15W Cement	AG
△ R621	VRN-VV3LB1R2J	J	1.2 3W M-Film	AC
			(32R-S50, 32R-S400)	
△ R621	VRN-VV3LB2R7J	J	2.7 3W M-Film	AB
			(36R-S50, 36R-S400)	
△ R622	VRN-RL2HCR56J+	X	0.56 1/2W M-Film	AE
			(36R-S50, 36R-S400)	
△ R622	VRN-RL2HCR68J+	X	0.68 1/2W M-Film	AE
			(32R-S50, 32R-S400)	
△ R623	VRN-RL3AB1R0J+	X	1.0 1W M-Film	AE
△ R624	VRS-RG3DB332J+	X	3.3k 2W M-Ox.	AE
R625	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R631	VRS-CY1JF391J	J	390 1/16W M-Ox.	AA
R632	VRS-CY1JF152J	J	1.5k 1/16W M-Ox.	AA
R633	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
▲▲ R651	VRN-RL2HC1R0J+	X	1.0 1/2W M-Film	AE
▲▲ R652	VRD-RA2EE103J	J	10k 1/4W Carbon	AA
			(32R-S50, 32R-S400)	
▲▲ R652	VRD-RA2EE393J	J	39k 1/4W Carbon	AA
			(36R-S50, 36R-S400)	
▲▲ R653	VRD-RA2EE333J	J	33k 1/4W Carbon	AA
			(36R-S50, 36R-S400)	
▲▲ R653	VRD-RA2EE562J	J	5.6k 1/4W Carbon	AA
			(32R-S50, 32R-S400)	
▲▲ R654	VRD-RA2EE184J	J	180k 1/4W Carbon	AA
			(36R-S50, 36R-S400)	
▲▲ R654	VRD-RA2EE393J	J	39k 1/4W Carbon	AA
			(32R-S50, 32R-S400)	
▲▲ R655	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA
△ R658	VRS-RG3DB123J	J	12k 2W M-Ox.	AA
			(32R-S50, 32R-S400)	
△ R658	VRS-RG3DB153J	J	15k 2W M-Ox.	AA
			(36R-S50, 36R-S400)	
R671	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R672	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R673	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
R674	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
R675	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R677	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R679	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA
R680	VRS-CY1JF822J	J	8.2k 1/16W M-Ox.	AA
R681	VRS-CY1JF123J	J	12k 1/16W M-Ox.	AA
R682	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R683	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R684	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
R685	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R686	VRD-RA2EE222J	J	2.2k 1/4W Carbon	AA
R687	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
△ R688	VRN-RL3DB3R3J+	X	3.3 2W M-Film	AE
R689	VRS-CY1JF274J	J	270k 1/16W M-Ox.	AA
△ R690	VRS-RG3LB561J+	X	560 3W M-Ox.	AF
△ R691	VRG-RL2HB101J	J	100 1/2W Carbon	AB
△ R701	RR-DZ0049CEZZ	J	3.9M 1/2W Solid	AB
	or			
	RR-HZ0048CEZZ			
△ R702	VRW-KQ4AC1R2K	J	1.2 10W Cement	AE
△ R703	VRS-RG3LB101J	J	100 3W M-Ox.	AC
R704	VRD-RM2HD154J	J	150k 1/2W Carbon	AA
△ R705	VRN-RL3DBR22J	J	0.22 2W M-Film	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA118WEV5 (32R-S50)					R930	VRS-CY1JF563J	J	56k 1/16W M-Ox.	AA
PWB-A: DUNTKA118WEV7 (32R-S400)					R931	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
PWB-A: DUNTKA118WEV8 (36R-S50)					R932	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
PWB-A: DUNTKA118WEW0 (36R-S400)					R933	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
MAIN UNIT (Continued)					R934	VRS-CY1JF473J	J	47k 1/16W M-Ox.	AA
△ R706	VRN-RL3DBR22J	J	0.22 2W M-Film (36R-S50, 36R-S400)	AA	R935	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
△ R706	VRN-RL3DBR27J+	X	0.27 2W M-Film (32R-S50, 32R-S400)	AE	R936	VRS-CY1JF473J	J	47k 1/16W M-Ox.	AA
R707	VRS-RG2HC681J	J	680 1/2W M-Ox.	AA	R937	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R709	VRN-GA2EB1R0J	J	1.0 1/4W M-Film	AA	R938	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
R710	VRD-RM2HD330J	J	33 1/2W Carbon (32R-S50, 32R-S400)	AA	R939	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
R710	VRD-RM2HD470J	J	47 1/2W Carbon (36R-S50, 36R-S400)	AA	R940	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
R711	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA	R941	VRS-CY1JF183J	J	18k 1/16W M-Ox.	AA
△ R715	VRS-RG3DB153J	J	15k 2W M-Ox.	AA	R942	VRS-CY1JF273J	J	27k 1/16W M-Ox.	AA
△ R723	VRN-RL3DBR39J+	X	0.39 2W M-Film	AE	R943	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R724	VRS-RG2HC332J	J	3.3k 1/2W M-Ox.	AA	R951	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
△ R725	VRS-RG3AB182J	J	1.8k 1W M-Ox.	AA	R952	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R726	VRD-RM2HD102J	J	1.0k 1/2W Carbon (36R-S50, 36R-S400)	AA	R955	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
△ R727	VRN-RL3LB2R7J+	X	2.7 3W M-Film	AF	R958	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R734	VRD-RM2HD124J	J	120k 1/2W Carbon	AA	R959	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
△ R737	VRN-RL3DBR56J+	X	0.56 2W M-Film	AE	R961	VRD-RA2BE101J	J	100 1/8W Carbon	AB
R751	VRS-CY1JF473J	J	47k 1/16W M-Ox.	AA	R962	VRD-RA2BE101J	J	100 1/8W Carbon	AB
R755	VRS-RG3LB220J+	X	22 3W M-Ox.	AF	R963	VRD-RA2BE331J	J	330 1/8W Carbon (32R-S400, 36R-S400)	AA
R801	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA	R1404	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R802	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA	R1405	VRS-CY1JF392J	J	3.9k 1/16W M-Ox.	AA
R803	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA	R1406	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R804	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA	R1408	VRS-CY1JF821J	J	820 1/16W M-Ox.	AA
R805	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA	R1409	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R806	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA	R1410	VRS-CY1JF681J	J	680 1/16W M-Ox.	AA
R901	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA	R1411	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R902	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA	R1412	VRS-CY1JF821J	J	820 1/16W M-Ox.	AA
R903	VRD-RA2BE102J	J	1.0k 1/8W Carbon (32R-S400, 36R-S400)	AA	R1413	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R904	VRS-CY1JF683J	J	68k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1414	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R905	VRS-CY1JF223J	J	22k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1415	VRS-CY1JF821J	J	820 1/16W M-Ox.	AA
R906	VRS-CY1JF392J	J	3.9k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1416	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
R907	VRS-CY1JF182J	J	1.8k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1417	VRS-CY1JF273J	J	27k 1/16W M-Ox.	AA
R908	VRS-CY1JF102J	J	1.0k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1418	VRS-CY1JF153J	J	15k 1/16W M-Ox.	AA
R910	VRD-RA2BE102J	J	1.0k 1/8W Carbon (32R-S400, 36R-S400)	AA	R1419	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R911	VRS-CY1JF683J	J	68k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1420	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA
R912	VRS-CY1JF223J	J	22k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1423	VRS-CY1JF471J	J	470 1/16W M-Ox.	AA
R913	VRS-CY1JF392J	J	3.9k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1601	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R914	VRS-CY1JF182J	J	1.8k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1602	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R915	VRS-CY1JF102J	J	1.0k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1603	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R922	VRS-CY1JF102J	J	1.0k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1604	VRS-CY1JF152J	J	1.5k 1/16W M-Ox.	AA
R923	VRS-CY1JF102J	J	1.0k 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R1605	VRS-CY1JF391J	J	390 1/16W M-Ox.	AA
R924	VRS-CY1JF750J	J	75 1/16W M-Ox.	AA	R1606	VRS-CY1JF471J	J	470 1/16W M-Ox.	AA
R925	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA	R1607	VRS-CY1JF221J	J	220 1/16W M-Ox.	AA
R926	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA	R1608	VRS-CY1JF681J	J	680 1/16W M-Ox.	AA
R927	VRD-RA2EE750J	J	75 1/4W Carbon (32R-S400, 36R-S400)	AA	R1609	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
R928	VRD-RA2EE750J	J	75 1/4W Carbon (32R-S400, 36R-S400)	AA	R2001	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R929	VRS-CY1JF101J	J	100 1/16W M-Ox. (32R-S400, 36R-S400)	AA	R2002	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
					R2004	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
					R2006	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
					R2007	VRD-RA2BE223J	J	22k 1/8W Carbon (32R-S50, 36R-S50)	AA
					R2008	VRD-RA2BE102J	J	1.0k 1/8W Carbon (32R-S400, 36R-S400)	AA
					R2008	VRD-RA2BE224J	J	220k 1/8W Carbon (32R-S50, 36R-S50)	AA
					R2009	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
					R2010	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA

Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA118WEV5 (32R-S50)				
PWB-A: DUNTKA118WEV7 (32R-S400)				
PWB-A: DUNTKA118WEV8 (36R-S50)				
PWB-A: DUNTKA118WEW0 (36R-S400)				
MAIN UNIT (Continued)				
R2012	VRS-CY1JF471J	J	470 1/16W M-Ox.	AA
R2020	VRS-CY1JF223J	J	22k 1/16W M-Ox.	AA
R2023	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R2024	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2025	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2026	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2027	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2028	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R2031	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2032	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R2033	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R2040	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R2041	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
R2042	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2043	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
R2044	VRS-CY1JF682J	J	6.8k 1/16W M-Ox.	AA
R2045	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2046	VRD-RA2BE101J	J	100 1/8W Carbon	AB
R2047	VRS-CY1JF221J	J	220 1/16W M-Ox.	AA
R2048	VRS-CY1JF562J	J	5.6k 1/16W M-Ox.	AA
R2060	VRS-CY1JF221J	J	220 1/16W M-Ox.	AA
R2061	VRS-CY1JF562J	J	5.6k 1/16W M-Ox.	AA
R2062	VRS-CY1JF183J	J	18k 1/16W M-Ox.	AA
R2063	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA
R2064	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R2068	VRS-CY1JF103J	J	10k 1/16W M-Ox. (32R-S50, 36R-S50)	AA
R2069	VRS-CY1JF102J	J	1.0k 1/16W M-Ox. (32R-S400, 36R-S400)	AA
R2070	VRS-CY1JF103J	J	10k 1/16W M-Ox. (32R-S50, 36R-S50)	AA
R2071	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R2072	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R2073	VRS-CY1JF102J	J	1.0k 1/16W M-Ox. (32R-S400, 36R-S400)	AA
R2101	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2102	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2201	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R2202	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2203	VRD-RA2BE184J	J	180k 1/8W Carbon	AA
R2211	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R2212	VRS-CY1JF682J	J	6.8k 1/16W M-Ox.	AA
R2213	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
R2401	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2402	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2403	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2404	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2507	VRS-CY1JF823J	J	82k 1/16W M-Ox.	AA
R3001	VRD-RA2BE221J	J	220 1/8W Carbon	AA
R3002	VRD-RA2BE221J	J	220 1/8W Carbon	AA
R3003	VRS-CY1JF105J	J	1.0M 1/16W M-Ox.	AA
R3004	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA
R3005	VRS-CY1JF623J	J	62k 1/16W M-Ox.	AA
R3007	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R3008	VRS-CY1JF302J	J	3.0k 1/16W M-Ox.	AA
R3010	VRS-CY1JF392J	J	3.9k 1/16W M-Ox.	AA
R3011	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R3012	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R3017	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R3018	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA

SWITCH

S502 QSW-B0015CEZZ J Vertical Center AC

MISCELLANEOUS PARTS

△ RY701 RRLYJ0081CEZZ J Relay AL
or
RRLYJ0094CEZZ

Ref. No.	Part No.	★	Description	Code
△ F701	QFS-B5023CEZZ	J	Fuse, 5A/125V	AC
FB601	RBLN-0047CEZZ	J	Ferrite Bead	AB
FB671	RBLN-0047CEZZ	J	Ferrite Bead	AB
FB701	RBLN-0091GEZZ	X	Ferrite Bead	AC
	or			
	RBLN-0037CEZZ			
FB702	RBLN-0090GEZZ*	X	Ferrite Bead	AE
	or			
	RBLN-0036CEZZ			
FB704	RBLN-0091GEZZ	X	Ferrite Bead	AC
	or			
	RBLN-0037CEZZ			
FB706	RBLN-0091GEZZ	X	Ferrite Bead	AC
FH701	QFSDH1013CEZZ	J	Fuse Holder	AC
FH702	QFSDH1014CEZZ	J	Fuse Holder	AC
J921	QSODC0430CEZZ	J	Socket, S-Video (32R-S400, 36R-S400)	AE
P351	QPLGN0461CEZZ	J	Plug, 4-pin(S)	AB
P401	QPLGN0561CEZZ	J	Plug, 5-pin(GBN)	AB
P601	QPLGN0161FJZZ	J	Plug, 5-pin(K)	AE
P621	QPLGN0461CEZZ	J	Plug, 4-pin(YBN)	AB
P651	QPLGN0361CEZZ	J	Plug, 3-pin(P651-3)	AB
P701	QPLGN0460CEZZ	J	Plug, 4-pin(M)	AC
	or			
	QPLGN0404CEZZ			
P703	QPLGN0269GEZZ	J	Plug, 2-pin(P)	AB
P901	QPLGN0661CEZZ	J	Plug, 6-pin(EJ)	AD
P2002	QPLGN0461CEZZ	J	Plug, 4-pin(YR)	AB
P2401	QPLGN0561CEZZ	J	Plug, 5-pin	AB
RDA361	PRDAR5006MEFW	X	Heat Sink, for IC361	AE
RDA501	PRDAR0234PEFW	R	Heat Sink, for IC501	AH
RDA601	PRDAR0150PEFW	R	Heat Sink, for Q602	AL
RDA671	PRDAR1007MEFW	J	Heat Sink, for Q673	AH
RDA701	PRDAR1006MEFW	J	Heat Sink, for IC701	AH
RDA750	PRDAR5072CEFW	J	Heat Sink, for IC751	AC
TAN921	QTANJ0323CEZZ	J	AV Terminal (32R-S50, 36R-S50)	AL
TAN921	QTANJ0523CEZZ	X	AV Terminal (32R-S400, 36R-S400)	AL
	LX-BZ3049GEFD	J	Screw	AA
	LX-HZ3007MEFD	X	Screw	AF

Ref. No.	Part No.	★	Description	Code
PWB-B: DUNTK9303WEV0(32R-S50/S400)				
PWB-B: DUNTK9303WEV1(36R-S50/S400)				
CRT UNIT				
TRANSISTORS				
Q850	VS2SC4544LB2E	J	C4544LB	AD
Q851	VS2SC4544LB2E	J	C4544LB	AD
Q852	VS2SC4544LB2E	J	C4544LB	AD
Q853	VS2SC3198-Y-1	J	C3198-Y	AA
Q854	VS2SC3198-Y-1	J	C3198-Y	AA
Q855	VS2SC3198-Y-1	J	C3198-Y	AA
Q894	VS2SA1266-Y-1	J	A1266-Y	AA
DIODES				
D850	VHD1SS119//-1	J	Diode	AB
D851	VHD1SS119//-1	J	Diode	AB
D852	VHD1SS119//-1	J	Diode	AB
D894	VHD1SS119//-1	J	Diode	AB
D895	VHD1SS119//-1	J	Diode	AB
D896	RH-EX0616GEZZ	J	Zener Diode, 5.6V	AA
	or			
	RH-EX0298CEZZ			
D897	VHD1SS119//-1	J	Diode	AB
D898	VHD1SS119//-1	J	Diode	AB
COILS				
L852	VP-MK221K0000	J	Peaking 220μH	AB
L853	VP-MK221K0000	J	Peaking 220μH	AB
L854	VP-MK221K0000	J	Peaking 220μH	AB
CAPACITORS				
<i>[EL.... Electrolytic]</i>				
C850	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C851	VCEA0A1CW476M	J	47 16V EL.	AB
C876	VCCSPA1HL561J	J	560p 50V Ceramic	AA
C877	VCCSPA1HL471J	J	470p 50V Ceramic	AA
C878	VCCSPA1HL561J	J	560p 50V Ceramic	AA
C880	RC-KZ018JCEZZ	J	0.01 3kV Ceramic	AC
C892	VCEA0A1CW106M	J	10 16V EL.	AB
C893	VCEA0A1CW106M	J	10 16V EL.	AB
C895	VCEA0A1CW226M	J	22 16V EL.	AB
RESISTORS				
<i>[M-Ox.... Metal Oxide]</i>				
R842	VRD-RM2HD104J	J	100k 1/2W Carbon	AA
			(36R-S50/S400)	
R849	VRD-RA2BE181J	J	180 1/8W Carbon	AA
R850	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R851	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R852	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R854	VRD-RA2BE181J	J	180 1/8W Carbon	AA
R855	VRD-RA2BE181J	J	180 1/8W Carbon	AA
R856	VRD-RA2BE121J	J	120 1/8W Carbon	AA
R857	VRD-RA2BE121J	J	120 1/8W Carbon	AA
R858	VRD-RA2BE121J	J	120 1/8W Carbon	AA
△ R859	VRS-VV3DB273J	J	27k 2W M-Ox.	AA
△ R860	VRS-VV3DB273J	J	27k 2W M-Ox.	AA
△ R861	VRS-VV3DB273J	J	27k 2W M-Ox.	AA
△ R862	VRS-VV3DB273J	J	27k 2W M-Ox.	AA
△ R863	VRS-VV3DB273J	J	27k 2W M-Ox.	AA
△ R864	VRS-VV3DB273J	J	27k 2W M-Ox.	AA
R868	VRD-RM2HD224J	J	220k 1/2W Carbon	AA
R870	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R871	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R872	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R873	VRD-RA2BE220J	J	22 1/8W Carbon	AA
R874	VRD-RA2BE220J	J	22 1/8W Carbon	AA
R875	VRD-RA2BE220J	J	22 1/8W Carbon	AA
R876	VRD-RA2BE121J	J	120 1/8W Carbon	AA
R877	VRD-RA2BE121J	J	120 1/8W Carbon	AA
R878	VRD-RA2BE121J	J	120 1/8W Carbon	AA
R880	VRC-MA2HG332K	J	3.3k 1/2W Solid	AA
R881	VRC-MA2HG332K	J	3.3k 1/2W Solid	AA
R882	VRC-MA2HG332K	J	3.3k 1/2W Solid	AA
R883	VRD-RA2BE221J	J	220 1/8W Carbon	AA
R884	VRD-RA2BE221J	J	220 1/8W Carbon	AA

Ref. No.	Part No.	★	Description	Code
R885	VRD-RA2BE221J	J	220 1/8W Carbon	AA
R886	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R887	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R888	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R891	VRD-RA2BE561G	X	560 1/8W Carbon	AE
R892	VRD-RA2BE331G	X	330 1/8W Carbon	AE
R894	VRD-RA2BE152J	J	1.5k 1/8W Carbon	AA
R895	VRD-RA2EE561J	J	560 1/4W Carbon	AA
MISCELLANEOUS PARTS				
P860	QPLGN0461CEZZ	J	Plug, 4-pin (YBN)	AB
P880	QPLGN0561CEZZ	J	Plug, 5-pin (GBN)	AB
SC801	QSOCV0937CEZZ	J	CRT Socket (32R-S50/S400)	AL
SC802	QSOCV1011CEZZ	J	CRT Socket (36R-S50/S400)	AF

Ref. No.	Part No.	★	Description	Code
PWB-F: DUNTK9514WEV4				
CONTROL UNIT				

CAPACITOR*[EL.... Electrolytic]*

C4001 VCEA0A1HW475M J 4.7 50V EL. AB

RESISTORS

R4001 VRD-RA2BE103J J 10k 1/8W Carbon AA
 R4003 VRD-RA2BE273J J 27k 1/8W Carbon AA
 R4004 VRD-RA2BE563J J 56k 1/8W Carbon AA
 R4005 VRD-RA2BE331J J 330 1/8W Carbon AA
 R4006 VRD-RA2BE563J J 56k 1/8W Carbon AA
 R4007 VRD-RA2BE123J J 12k 1/8W Carbon AA
 R4008 VRD-RA2BE750J J 75 1/8W Carbon AA
 R4009 VRD-RA2BE153J J 15k 1/8W Carbon AA
 R4010 VRD-RA2BE272J J 2.7k 1/8W Carbon AA

SWITCHES

S4001 QSW-K0202PEZZ R Power AC
 S4002 QSW-K0202PEZZ R CH-Up AC
 S4003 QSW-K0202PEZZ R CH-Down AC
 S4004 QSW-K0202PEZZ R VOL-Up AC
 S4005 QSW-K0202PEZZ R VOL-Down AC

MISCELLANEOUS PARTS

J4001 QJAKE0179CEZZ X Jack, Audio-In(L) AP
 J4002 QJAKE0180CEZZ J Jack, Audio-In(R) AE
 J4003 QJAKE0181CEZZ X Jack, Video-In AP
 P4001 QPLGN0461CEZZ J Plug, 4-pin(YR) AB
 P4003 QPLGN0661CEZZ J Plug, 6-pin(EJ) AD
 RMC4001 RRMCU0230CEZZ X R/C Receiver AK

or

RRMCU0231CEZZ

QCNW-0176MEZZ X Connecting Cord AH

QCNW-0179MEZZ X Connecting Cord AM

Ref. No.	Part No.	★	Description	Code
PWB-R: DUNTK9511WEV8				
(32R-S400, 36R-S400)				
P-IN-P UNIT				

INTEGRATED CIRCUITS

IC1701 VHiMM1117XF1E* X MM1117XFBE AH
 IC1781 VHiKA7805AP-1 J KA7805API AE
 IC1801 VHiM65667FP-2 J M65667FP BC

TRANSISTORS

You can substitute "VS2SC2412-C-1" or "VS2SC2462-C-1" for "VS2SD601AR/-1".

Q1721 VS2SD601AR/-1 J 2SD601AR AC
 Q1741 VS2SB709AR/-1 J 2SB709AR AC

or

VS2SA1037KR-1
 Q1742 VS2SB709AR/-1 J 2SB709AR AC

or

VS2SA1037KR-1
 Q1761 VS2SB709AR/-1 J 2SB709AR AC

or

VS2SA1037KR-1
 Q1762 VS2SB709AR/-1 J 2SB709AR AC

or

VS2SA1037KR-1
 Q1791 VS2SC1959Y/1E J 2SC1959Y AC
 Q1861 VS2SB709AR/-1 J 2SB709AR AC

or

VS2SA1037KR-1
 Q1881 VS2SD601AR/-1 J 2SD601AR AC
 Q1882 VS2SD601AR/-1 J 2SD601AR AC
 Q1883 VS2SD601AR/-1 J 2SD601AR AC

DIODES

You can substitute "RH-DX0475CEZZ" for "VHD1SS119/-1".

D1791 RH-EX0604GEZZ J Zener Diode, 4.3V AB

D1801 VHD1SS119/-1 J Diode AB

D1821 VHD1SS119/-1 J Diode AB

CRYSTAL

X1861 RCRSB0283CEZZ J Crystal AG

or

RCRSB0241CEZZ

COILS

L1721 VP-XF680K0000 J Peaking 68μH AB

L1801 VP-XF100K0000 J Peaking 10μH AB

L1821 VP-XF100K0000 J Peaking 10μH AB

L1861 VP-XF100K0000 J Peaking 10μH AB

L1862 VP-XF100K0000 J Peaking 10μH AB

L1863 VP-XF100K0000 J Peaking 10μH AB

CAPACITORS*[EL.... Electrolytic]*

C1701 VCEA0A1HW475M J 4.7 50V EL. AB

C1702 VCEA0A1HW475M J 4.7 50V EL. AB

C1703 VCEA0A1HW475M J 4.7 50V EL. AB

C1721 VCEA0A1HW106M J 10 50V EL. AB

C1722 VCCCCY1HH330J J 33p 50V Ceramic AA

C1741 VCQYTA1HM473J J 0.047 50V Mylar AA

C1742 VCEA0A1HW105M J 1.0 50V EL. AB

C1743 VCQYTA1HM472J J 4700p 50V Mylar AB

C1761 VCQYTA1HM473J J 0.047 50V Mylar AA

C1762 VCEA0A1HW105M J 1.0 50V EL. AB

C1763 VCQYTA1HM682J J 6800p 50V Mylar AB

C1781 VCEA0A1CW476M J 47 16V EL. AB

C1791 VCEA0A1AW107M J 100 10V EL. AB

C1792 VCEA0A1AW107M J 100 10V EL. AB

C1801 VCKYCY1CB104K J 0.1 16V Ceramic AB

C1802 VCKYCY1HB103K J 0.01 50V Ceramic AA

C1803 VCKYCY1HB103K J 0.01 50V Ceramic AA

C1804 VCKYCY1HF103Z J 0.01 50V Ceramic AA

C1805 VCEA0A1HW106M J 10 50V EL. AB

C1806 VCKYCY1CB104K J 0.1 16V Ceramic AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-R: DUNTK9511WEV8									
(32R-S400, 36R-S400)									
P-IN-P UNIT (Continued)									
C1807	VCKYCY1HB103K	J	0.01 50V Ceramic	AA	R1825	VRS-CY1JF183J	J	18k 1/16W M-Ox.	AA
C1809	VCKYCY1HB103K	J	0.01 50V Ceramic	AA	R1828	VRS-CY1JF153J	J	15k 1/16W M-Ox.	AA
C1810	VCEA0A1CW226M	J	22 16V EL.	AB	R1831	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
C1811	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1832	VRS-CY1JF682J	J	6.8k 1/16W M-Ox.	AA
C1812	VCEA0A1HW106M	J	10 50V EL.	AB	R1833	VRS-CY1JF272J	J	2.7k 1/16W M-Ox.	AA
C1821	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1834	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA
C1822	VCEA0A1HW106M	J	10 50V EL.	AB	R1841	VRS-CY1JF153J	J	15k 1/16W M-Ox.	AA
C1841	VCEA0A1HW106M	J	10 50V EL.	AB	R1842	VRS-CY1JF471J	J	470 1/16W M-Ox.	AA
C1842	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1843	VRS-CY1JF391J	J	390 1/16W M-Ox.	AA
C1843	VCCCY1HH680J	J	68p 50V Ceramic	AA	R1861	VRS-CY1JF153J	J	15k 1/16W M-Ox.	AA
C1845	VCKYCY1HB103K	J	0.01 50V Ceramic	AA	R1862	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
C1846	VCCCY1HH151J	J	150p 50V Ceramic	AA	R1863	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
C1847	VCKYCY1HB103K	J	0.01 50V Ceramic	AA	R1864	VRS-CY1JF221J	J	220 1/16W M-Ox.	AA
C1848	VCKYCY1CB104K	J	0.1 16V Ceramic	AB	R1865	VRS-CY1JF474J	J	470k 1/16W M-Ox.	AA
C1849	VCEA0A1HW106M	J	10 50V EL.	AB	R1866	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA
C1850	VCKYCY1CB104K	J	0.1 16V Ceramic	AB	R1867	VRS-CY1JF202J	J	2.0k 1/16W M-Ox.	AA
C1851	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1868	VRS-CY1JF510J	J	51 1/16W M-Ox.	AA
C1861	VCKYCY1CB104K	J	0.1 16V Ceramic	AB	R1881	VRS-CY1JF473J	J	47k 1/16W M-Ox.	AA
C1862	VCKYCY1CB104K	J	0.1 16V Ceramic	AB	R1882	VRS-CY1JF223J	J	22k 1/16W M-Ox.	AA
C1863	VCCCY1HH101J	J	100p 50V Ceramic	AA	R1883	VRS-CY1JF123J	J	12k 1/16W M-Ox.	AA
C1865	VCFYFA1HA154J	J	0.15 50V Mylar	AC	R1884	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
C1866	VCQYTA1HM103J	J	0.01 50V Mylar	AA	R1885	VRS-CY1JF473J	J	47k 1/16W M-Ox.	AA
C1867	VCKYCY1CB104K	J	0.1 16V Ceramic	AB	R1886	VRS-CY1JF223J	J	22k 1/16W M-Ox.	AA
C1868	VCFYFA1HA474J	J	0.47 50V Mylar	AC	R1887	VRS-CY1JF123J	J	12k 1/16W M-Ox.	AA
C1869	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1889	VRD-RA2BE101J	J	100 1/8W Carbon	AB
C1870	VCEA0A1HW106M	J	10 50V EL.	AB	MISCELLANEOUS PARTS				
C1871	VCEA0A1HW106M	J	10 50V EL.	AB	P1701	QPLGZ0810CEZZ	J	Plug, 8-pin	AD
C1872	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	P1702	QPLGZ0610CEZZ	J	Plug, 6-pin	AB
					P1703	QPLGZ0810CEZZ	J	Plug, 8-pin	AD
					SLD1801	PSLDM0012MEFW	J	Shield	AD

RESISTORS

[M-Ox. ... Metal Oxide]

RJ1	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
RJ2	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
RJ3	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
RJ4	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
RJ5	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
RJ6	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
RJ7	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
RJ8	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
RJ9	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
RJ10	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
RJ11	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
R1701	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R1702	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R1703	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R1704	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R1705	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R1706	VRS-CY1JF474J	J	470k 1/16W M-Ox.	AA
R1721	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R1722	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R1723	VRS-CY1JF822J	J	8.2k 1/16W M-Ox.	AA
R1724	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA
R1741	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R1742	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R1743	VRS-CY1JF151J	J	150 1/16W M-Ox.	AA
R1744	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
R1745	VRS-CY1JF474J	J	470k 1/16W M-Ox.	AA
R1746	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
R1747	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1761	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R1762	VRS-CY1JF151J	J	150 1/16W M-Ox.	AA
R1763	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R1764	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
R1765	VRS-CY1JF474J	J	470k 1/16W M-Ox.	AA
R1766	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
R1791	VRD-RA2BE151J	J	150 1/8W Carbon	AA
R1801	VRS-CY1JF473J	J	47k 1/16W M-Ox.	AA
R1821	VRS-CY1JF123J	J	12k 1/16W M-Ox.	AA
R1822	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R1823	VRS-CY1JF183J	J	18k 1/16W M-Ox.	AA

Ref. No.	Part No.	★	Description	Code
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MISCELLANEOUS PARTS

△ ACC701	QACCD3065CESA	J	AC Cord	AN
SP1	VSP1206PB396E	X	Speaker, 6 ohm (L)	AQ
SP2	VSP1206PB396E	X	Speaker, 6 ohm (R)	AQ
	QCNW-0143MEZZ	X	Connecting Cord	AK
	QCNW-0144MEZZ	X	Connecting Cord	AG
	QCNW-0178MEZZ	X	Connecting Cord	AG
			(32R-S50/S400)	
	QCNW-0145MEZZ	X	Connecting Cord	AE
			(36R-S50/S400)	
	TCAUH3044GJZZ	X	Caution Card	AD
			(32R-S50/S400)	
	TCAUH3048GJZZ	X	Caution Card	AD
			(36R-S50/S400)	

Ref. No.	Part No.	★	Description	Code
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PACKING PARTS (NOT REPLACEMENT ITEM)

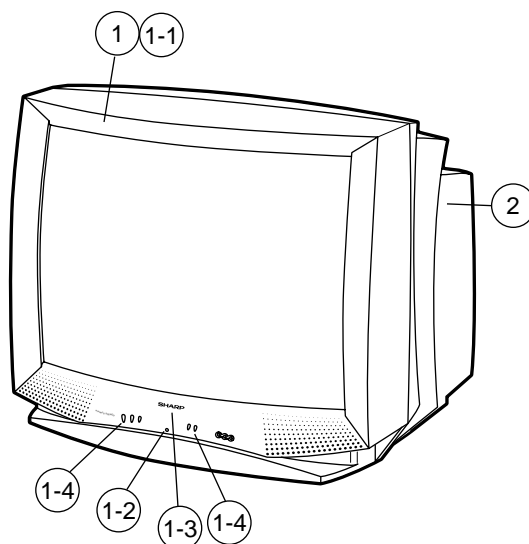
	SPAKC0167GJZZ	-	Packing Case (32R-S50)	—
	SPAKC0169GJZZ	-	Packing Case (32R-S400)	—
	SPAKC0172GJZZ	-	Packing Case (36R-S50)	—
	SPAKC0174GJZZ	-	Packing Case (36R-S400)	—
	SPAKX0171MEZZ	-	Buffer Material	—
			(32R-S50/S400)	
	SPAKX0172MEZZ	-	Buffer Material	—
			(36R-S50/S400)	
	SSAKA0101GJZZ	-	Polyethylene Bag	—

SUPPLIED ACCESORRIES

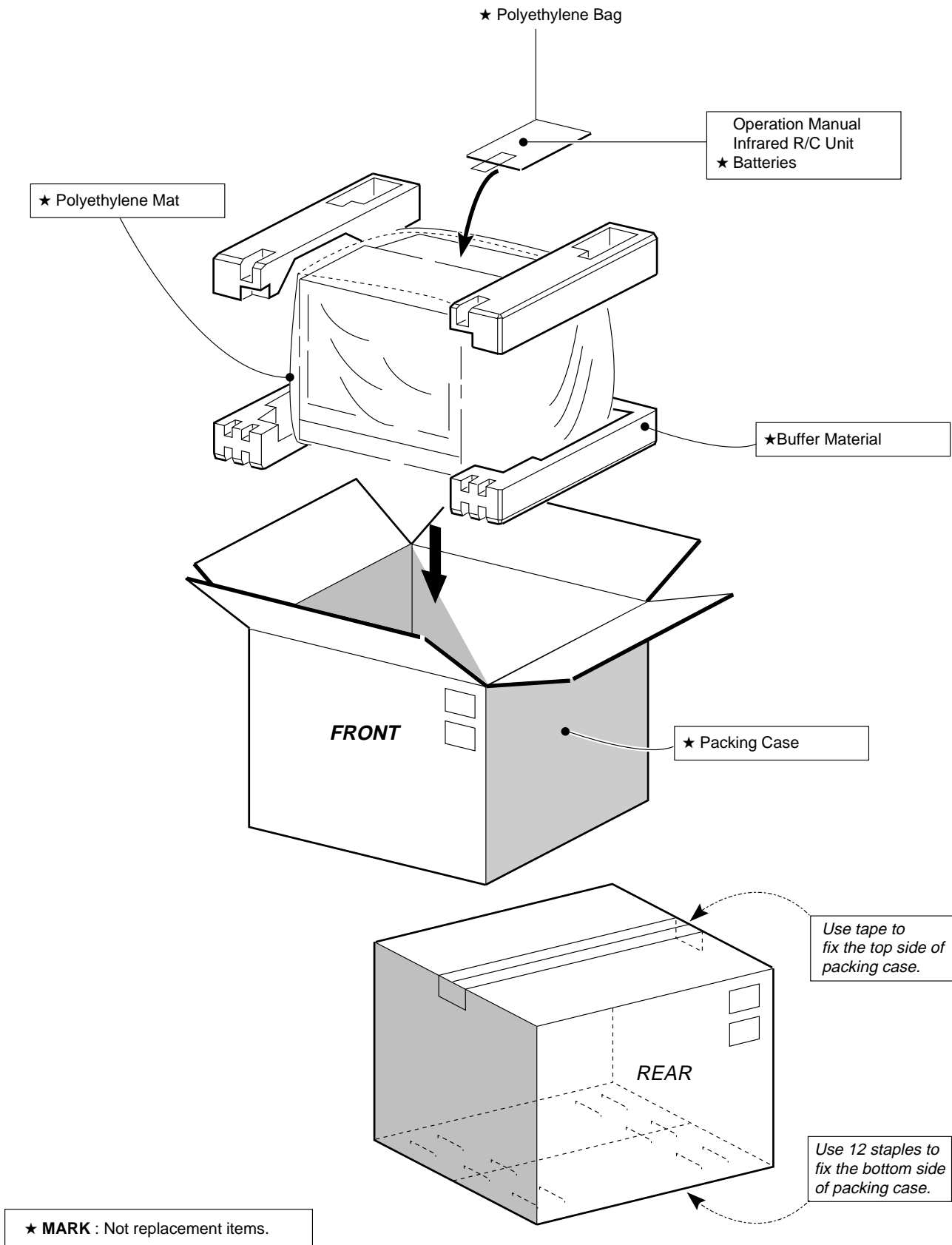
	RRMCG1324CESA	J	Infrared R/C Unit	AT
			(32R-S50, 36R-S50)	
	RRMCG1627CESA	X	Infrared R/C Unit	AU
			(32R-S400, 36R-S400)	
	TGAN-0001GJZZ	X	Guarantee Card	AB
	TiNS-7362GJZZ	X	Operation Manual	AG
			(32R-S50, 36R-S50)	
	TiNS-7366GJZZ	X	Operation Manual	AG
			(32R-S400, 36R-S400)	

CABINET PARTS

1	CCABA0121WEH0	X	Front Cabinet Ass'y	BG
			(32R-S50)	
1	CCABA0136WEH0	X	Front Cabinet Ass'y	BG
			(32R-S400)	
1	CCABA0123WEH0	X	Front Cabinet Ass'y	BM
			(36R-S50)	
1	CCABA0144WEH0	X	Front Cabinet Ass'y	BM
			(36R-S400)	
1-1	Not Available	-	Front Cabinet	—
1-2	GCOVA1039MEKA	X	Cover for R/C	BM
1-3	HBDGB1009MESB	X	Badge, "SHARP"	AG
			(32R-S50/S400)	
1-3	HBDGB1010MESB	X	Badge, "SHARP"	AG
			(36R-S50/S400)	
1-4	JBTN-1105MEKA	X	Button, Power, Vol-up/down, CH-up/down	AQ
2	GCABB0117GJKA	X	Rear Cabinet (32R-S50)	BD
2	GCABB0127GJKA	X	Rear Cabinet (32R-S400)	BD
2	GCABB0119GJKA	X	Rear Cabinet (36R-S50)	BF
2	GCABB0131GJKA	X	Rear Cabinet (36R-S400)	BG



PACKING OF THE SET



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